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A SMALL HOARD OF CARAUSIUS
FOUND NEAR BICESTER, OXFORDSHIRE

C.E.King

The Hoard

This small group of seventeen coins was discovered with the aid of a metal detector approximately six miles from Bicester. The exact location is unknown as the finder did not wish to divulge it. When the hoard was first brought to the Ashmolean Museum it was noted that with the exception of three pieces the coins were fused together in a lump. According to the finder, there was no sign of a container but the way in which the coins were fused together in two approximately parallel rows suggests that they may have been wrapped in rolls or stored in a container which would have allowed them to be fused into this sort of shape. The coins were returned to the finder who had them separated and cleaned after which he brought them back to the Ashmolean so that they could be studied. All the coins are illustrated in the plate, and listed in the catalogue below.

Sixteen of the seventeen coins had obverses of Carausius and the seventeenth was minted by him in Maximian's name. The absence of any coins of Allectus suggests a burial date prior to the latter's accession in 293. The small number of coins in the find is characteristic of hoards composed solely of coins of Carausius and Allectus, the notable exception being Little Orme's Head which may have had as many as 700 coins.¹ Ten of the coins were from the London mint, four from the 'C' mint and three were unmarked.

The coins ranged in weight from 5.69g to 3.69g and their average was 4.54g although the sample is too small for any valid inferences to be drawn from it. Most of the die axes were at six o'clock.

The type distribution is as follows: thirteen coins had a PAX reverse, three had PROVIDENTIA and there was one VIRTVS. The dominance of PAX is hardly surprising since it is the most common reverse on Carausius's coins.

On the whole the coins were in excellent condition and difficulties in deciphering the legends possibly resulted from failure in the striking process rather than from wear. On a number of coins part of the obverse legend is missing or indistinct (nos. 3, 6, and 9) and the same is true of some reverses (nos. 1, 3, 5, and 9). None of the coins in the hoard could be die-linked to each other or to coins in the museum and there did not seem to be any irregular coins in the find.

The Classification and Date of Carausius's Antoniniani

For over a decade Carson's arrangement and dating of the issues of Carausius and Allectus has served as the basis for the classification and

chronology of the coinage of the British empire.² He divided the antoniniani of Carausius into two periods: the earlier, in which a shorter obverse legend was in common use (IMP CARAVSIVS...), and the later, during which a longer obverse (IMP C CARAVSIVS...) predominated.³ While this division is in general correct and can be supported on stylistic grounds as I shall try and show below, it none the less tends to obscure another potentially important aspect of the coinage; namely, that mints behaved quite differently in regard to the number of obverse legends they used. This emerges quite clearly from an examination of the obverse legends recorded by Roger Bland in the Blackmoor hoard (Table 1).⁴ From this table it is clear that London had the fewest variants and the 'C' mint had significantly more. By far the largest range of variation occurs on the unmarked coins. These pieces are generally attributed to the London mint before it began marking its coins but if the unmarked pieces are from London then the mint changed its behaviour radically once it began to mark coins.⁵ In this context Bland has commented that it is possible that the unmarked pieces were produced at more than one mint.⁶ However, the problem of the unmarked coins is a vexed one since irregular pieces abound in the early part of Carausius's reign and can be extremely difficult to distinguish from the regular pieces which are themselves often rather crude in style.⁷

Interestingly the portrait style of Carausius's coins also falls into two distinct groups. In the first the emperor is represented as bearded, jowled, and quite gross in appearance, while in the second his portrait seems to be imitating much more closely that of his legitimate colleagues, Diocletian and Maximian, and therefore has become much more 'tetrarchic'. Compare, for example, the style of obverses one to five with that of numbers ten to thirteen. A similar change in portrait style can also be observed on the silver and the gold.⁸

There is no doubt that the 'tetrarchic' portrait is later in date than the other since it alone is found in the ^{S|P}
_{ML} mark which spanned the end of Carausius's reign at London and the beginning of that of Allectus.⁹ It was also the portrait style in use during the period when Carausius recognized Diocletian and Maximian either with the triple portrait and obverse legend CARAVSIVS ET FRATRES SVI or individually with the AVGGG reverses.¹⁰ The longer obverse legend (IMP C CARAVSIVS...) is commonly found with the 'tetrarchic' portrait. Examination of the portrait style at the Rouen mint suggests it too was meant to be 'tetrarchic' which is supported by the obverse legends which, on the antoniniani at least, invariably appeared with the longer form.¹¹ By contrast the unmarked coins are almost always found with the 'jowled' portrait and shorter legend which supports their issue relatively early in the reign.

When did the change in style and obverse legend occur? At London it is clear that the changes took place in three distinct stages. The first was the addition of XXI to the mintmark in the ^{B|E}
_{MLXXI} issue, followed at a later stage by the adoption of the longer obverse legend and a gradual change in portrait. It was not until the appearance of the next issue, however, that the full blown 'tetrarchic' portrait appeared. This mark, ^{S|P}
_{MLXXI}, was the one in which Carausius minted coins in the name of Diocletian and Maximian. In his final issue at London Carausius retained the longer obverse legend and 'tetrarchic' portrait but no longer recognized his official colleagues.

The evolution of the coinage at the 'C' mint is not quite so easily

TABLE 1

LEGEND	UNMARKED	LONDON						'C' MINT								'RSR'	ROUEN
	+	ML	C ML	L ML	F O ML	B E MLXXI	S P MLXXI	+	C MC	F O C	+	S C C	S C	S P C	S P C	1 RSR	+
IMP CARAVSIVS PF AVGG	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS PF AVG	132	19	1	6	22	13	-	13	-	1	1	-	1	-	-	-	-
IMP CARAVSIVS PF AV	15	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS PF AG	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS PF A	7	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS P AVG	28	2	-	-	-	-	-	1	1	-	-	1	-	1	-	-	-
IMP CARAVSIVS P AV	6	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS AVG	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IMP CARAVSIUS AV	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS PI AVG	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
IMP CARAVSIVS PI AV	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IMP CARAVSIVS I AV	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IMP CM CARAVSIVS	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
PF AVG																	
IMP C CARAVSIVS PF AVG	3	-	-	-	-	13	16	1	-	-	-	1	5	10	-	-	1
IMP C CARAVSIVS PF AV	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
IMP C CARAVSIVS P AVG	-	-	-	-	-	-	-	-	-	-	-	5	3	-	-	-	1
IMP C CARAVSIVS AVG	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	1
IMP C CARAVSIVS PF IN AVG	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
IMP C CARAVSIVS PF I AVG	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
IMP C CARAVSIVS PI AVG	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
IMP C CARAVSIVS IVG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VICTORIA CARAVSI	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VIRTVS CARAVSI AVG	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
UNCERTAIN LEGEND	42	2	-	-	2	2	1	3	-	1	1	-	-	1	1	1	1
TOTAL	250	26	1	6	25	28	17	24	1	1	2	8	12	15	3	3	4

divisible into stages but is none the less clear. The number XXI was added to the CXXI and MCXXI issues which seem to have been much less common than their equivalent issues at London. There were, for example, only two CXXI coins in the Blackmoor hoard, one CXXI and one MCXXI in the Little Orme's Head hoard, three CXXI and one MCXXI in the Linchmere hoard and none in the Colchester hoard. The change to the longer obverse legend occurred in the $\frac{S|C}{C}$, $\frac{S|C}{C}$, $\frac{S|P}{C}$ marks according to Carson's arrangement.

He has grouped them together as he can see no clear way of separating them chronologically but there is no doubt that the longer legend forms were predominant in these issues and the change in portrait style is also evident.¹³

It was in the course of the next issue, $\frac{S|P}{C}$, that the 'fratres' pieces appeared and Carausius minted coins for Diocletian and Maximian.

Carson has argued that the shift from the shorter to the longer obverse legend took place late in 290 or in 291 because aurei with reverses which refer to Carausius's quinquennalia occur with both.¹⁴ If his proposed date is correct then the first stage of the changeover (the addition of XXI to the mintmark) should have taken place shortly before this time. But Carson's argument cannot be unreservedly accepted for, while it is always tempting to date coins referring to a specific anniversary (in this instance VOT V and MVLT X) to the year in which it would have occurred, it is somewhat hazardous to do so when it is known that such celebrations were often anticipated by several years in the later Roman coinage.¹⁵

Further, Shiel has argued that the portrait style of the aurei in question belongs to the early part of Carausius's reign.¹⁶ He has divided the gold coinage into three groups: 1) aurei attributed to the 'Rouen' mint; 2) aurei minted in the period when Carausius was recognizing his legitimate colleagues; and 3) the group which has the jowled portrait.¹⁷ There are only five aurei known from this last group, including the one with the IMP C obverse. Shiel has die-linked these early aurei to the unmarked and RSR silver (which again have the 'jowled' portrait) and, although he has recorded nearly 150, again only one has the longer obverse.¹⁸ Thus the occurrence of the longer obverse on gold and silver seems to have been the exception rather than the rule and leads one to query whether it can validly be linked to the date when the longer legend began to be used on the antoniniani. This doubt is reinforced by the fact that the gold and very rare silver minted by Carausius when he was recognizing his official colleagues has a 'tetrarchic' portrait but very short obverses (CARAVSIVS PF AVG, MAXIMIANVS PF AVG). The gold minted at 'Rouen' does not obviously support Carson's argument either since the portrait is 'tetrarchic' and both the shorter and longer obverse legends occur and are die-linked to the same reverses. This implies, if not a simultaneous emission, one very closely connected in time. It is possible that the 'Rouen' mint was operating towards the end of the 'transitional' period at London and the 'C' mint but this brings us no closer to establishing the date of the changeover.

The hoard evidence is not incompatible with the suggestion that the 'Rouen' coins could have been minted in the same period as the changeover in portrait and legend on the antoniniani of the London and 'C' mints. The latest coins in the Little Orme's Head hoard are MCXXI and SC from the 'C' mint dated by Carson to 290 and 291 respectively. The Penard hoard ends with a coin of 292 (VIRTVS AVGGG, $\frac{S|P}{C}$) which belongs to the period when Carausius was recognizing Diocletian and Maximian.¹⁹ Both hoards have 'Rouen' coins with the 'tetrarchic' portrait. Although it could be argued

that the 'Rouen' coins should be earlier in date than the British coins since they came from a continental mint and therefore needed more time to reach hoards in Wales, the rate of speed at which coinage moved at this time is an unknown quantity. The exact site of the 'R' mint, which is beyond the scope of this paper, is also still open to doubt.

Linked to the date of the changes in portrait and obverse legend is the reason for them. It has been argued that the changes occurred in 289 after an abortive invasion by Maximian's fleet and that they were a sign of the acceptance by the central emperors of an unpalatable status quo.²⁰ Whether or not the legitimate emperors tacitly accepted Carausius (as some ancient sources suggest), they were in no position having lost their punitive fleet to control what he put on his coinage.²¹ It is significant that they minted no coins in his name and never openly recognized him.

It has also been suggested that by imitating the coins of Diocletian and Maximian Carausius may have been seeking to persuade them to accept him as 'legitimate'. This argument is not altogether satisfactory since it seems to assume that the legitimate emperors (and their subjects) would have actually seen Carausius's coins. In this context it is worth noting that the circulation of Carausian coins never reached significant proportions in Gaul.²² Nor does there seem to be any particular reason to believe that Carausius would have thought this would be a suitable means of influencing imperial policy.

The nature of the changes which Carausius made in his coinage do suggest however that he was asserting his official status and possibly his implicit recognition by Diocletian and Maximian. Norman Shiel has suggested, and Carson has agreed, that the changes may have been motivated by a desire on Carausius's part to persuade those within his sphere of influence that he was a legitimate ruler.²³ Although plausible, this argument too has its weakness. If Carausius were attempting to influence opinion largely or exclusively in Britain or even northern Gaul, he was dealing with a population which apparently had little experience of handling the official coinage of the 270s and 280s since very little of it seems to have reached these areas.²⁴ Given these circumstances there seems little point in introducing such dramatic changes in the coinage but the fact remains that Carausius did so. The nature of the changes suggest that he was asserting his equality of status with Diocletian and Maximian and possibly his readiness to conform with official mint policy.

In the circumstances it is worth considering for whom these coins were intended. Clearly one major group of recipients must have been Carausius's soldiers and they logically could have been expected to have some familiarity with the coinage of the legitimate rulers. The choice of obverse legends, portraits, and the recognition of Diocletian and Maximian may well have been intended to impress or influence Carausius's army, although precisely why he chose these particular means of doing so is less clear.

We are left, then, with the problem of the date when these changes occurred. It seems reasonable to assume that they did not begin before Maximian's abortive campaign in 289 and that any recognition of Diocletian and Maximian would certainly have ceased after the nomination of Constantius as Caesar in 293. This leaves the years 290 to 293 for the change in portrait, obverse legend, the 'fratres' issue, and the recognition of Diocletian and Maximian. Beyond this it is impossible to be certain when the changes began or how long the process took since mint output was not necessarily continuous in this period.

It is conceivable that the 'fratres' issue, the gold and the silver with the short obverses (CARAVSIVS PF AVG, MAXIMIANVS PF AVG), and the gold and the antoniniani with the AVGGG legends can be associated with Carausius's quinquennalia. Certainly it was the sort of occasion when precious metal issues and special pieces like the 'fratres' coins were minted and it would have been a suitable time for Carausius to have stressed his legitimacy. The earliest date when he would have celebrated this anniversary would have been late in 290 or in 291 which would mean that the changes in legend, portrait, etc. would have had to occur earlier in 290 or even in 289. This is compatible with the changes having taken place after Maximian's fleet was destroyed.

Carson, however, has dated the 'fratres' pieces and the AVGGG coinage to late 291 or 292, suggesting that they were intended to serve as internal propaganda.²⁵ His date for these issues rests on his argument that the change to the longer obverse legend cannot have taken place before late 290 and that the issue of antoniniani at London (^{B|E}
~~MLXXI~~), which spans the change from the shorter to the longer obverse, was a large one and may have lasted for almost a year. However, if his dating is not accepted there is no obstacle to placing the special issues in Carausius's quinquennial year.

The problem of relating the unmarked antoniniani and the issues from the 'Rouen' mint to the London and 'C' mint issues remains. Not only is it still uncertain exactly where the mint (or mints) in both cases may have been located but the dating of the respective issues is equally contentious. Apart from suggesting that the unmarked antoniniani should have been minted before the change in portrait and obverse legend (i.e. 286-9) and the 'Rouen' pieces during or after the transitional period, there is little evidence on which to base an exact chronology. A detailed discussion of these problems is beyond the scope of this paper although it is important to remember that until all the elements of Carausius's coinage have been considered in terms of their relationship to one another it will be difficult to construct even a relative chronology which has validity, never mind an absolute one.

NOTES

1. N.Shiel, *The Episode of Carausius and Allectus: The Literary and Numismatic Evidence*, British Archaeological Reports, 40 (1977), pp.58-60, 74-75.
2. R.A.G.Carson, 'The Sequence-marks on the Coinage of Carausius and Allectus'. in *Mints, Dies, and Currency: Essays Dedicated to the Memory of Albert Baldwin*, edited by R.A.G.Carson (London, 1971), pp.57-65.
3. Carson, 'Sequence-marks', p.58.
4. R.Bland, *Coin Hoards from Roman Britain, Volume III, The Blackmoor Hoard*, British Museum Occasional Paper No.33 (London, 1982), pp.63-78.
5. P.J.Casey 'Carausius and Allectus - Rulers in Gaul?', *Britannia*, 8 (1977), 289, note 38.
6. Bland, *Coin Hoards*, p.11.
7. H.A.Seaby, 'A find of coins of Carausius from the Little Orme's Head',

- NC 6th ser. 16 (1956), 207 grades the style in five stages from good to very barbarous. See also Shiel, *Episode*, pp.166-70.
8. Shiel, *Episode*, pp.146-47, Pl.A; Pl.E, no.2 is a silver coin from gold dies.
 9. Carson, 'Sequence Marks', p.61.
 10. R.A.G.Carson 'Carausius et fratres sui: A reconsideration', in *Studia Paulo Naster Oblata I*, edited by S.Scheers (Leuven, 1982), plates xxix-xxxii.
 11. E.B.Beaujard and H.Huvelin, 'Le trésor de Rouen et l'occupation de la Gaule par Carausius', in *Histoire et Numismatique en Haut-Normandie*, edited by N.Gauthier, *Cahiers des Annales de Normandie*, 12A (Caen, 1980), pp.81-91.
 12. Bland, *Blackmoor Hoard*, p.68; Seaby, 'Little Orme's Head', p.214; P.H. Webb, 'The Linchmere hoard,' NC 5th ser. 5 (1925), 175; A.H.F.Baldwin, 'A find of coins of Carausius and Allectus from Colchester', NC 5th ser. 10 (1930), 191-95.
 13. Carson, 'Sequence-marks', p.62.
 14. Carson, 'Sequence-marks', p.58; *RIC V*, pt.2, nos.3 and 4.
 15. Shiel, *Episode*, pp.153-54.
 16. N.Shiel, 'Un aureus de Carausius conservé au Cabinet des Médailles de Paris', *RN* 6th ser. 16 (1974), 165-66.
 17. Shiel, *Episode*, pp.145-48, Pls. A and B.
 18. Shiel, *Episode*, pp.94-142, plates E-N; A.S.Robertson, *Roman Imperial Coins in the Hunter Coin Cabinet*, IV, Pl.61, no.172.
 19. Seaby, 'Little Orme's Head', 213-214; G.C.Boon, 'The Penard Roman imperial hoard: an interim report and a list of Roman hoards in Wales,' *Bulletin of the Board of Celtic Studies*, 22 (1968), 294-97.
 20. H.G.Pflaum, 'Emission au nom des trois empereurs frappée par Carausius', *RN*, 6th ser. 2 (1959-60), 53-73, esp. 71-73; *RIC V*, pt. 2 442-43; B.Beaujard and H.Huvelin, 'A propos de l'atelier monétaire rouennais de Carausius', *BSFN*, 33 (1978), 360-67.
 21. Aur. Vict., xxxix, 39; Eutr, IX, 22.
 22. X.Loriot, 'Trousseilles de monnaies de Carausius sur le continent', *BSFN*, 34 (1979), 577-83; P.-H.Mitard, 'Trousseilles de monnaies dans le Vexin français (Val d'Oise)', *BSFN*, 35, (1980), 675-76.
 23. N.Shiel, 'Carausius et fratres sui', *BNJ* 48 (1978), 10; Carson, 'Carausius', pp.257-58.
 24. H.Mattingly, 'The clash of the Coinages circa 270-296', in *Studies in Roman Economic and Social History in Honour of A.C.Johnson*, edited by P.R.Coleman-Norton (Princeton, 1951), pp.275-89; C.E.King, 'The Circulation of Coin in the Western Provinces A.D. 260-295', in *The Roman West in the Third Century; Contributions from Archaeology and History*, edited by A.King and M.Henig, British Archaeological Reports, International Series, 109 (1) (Oxford, 1981), pp.89-126 esp. pp.93-94.
 25. Carson, 'Carausius', pp.256-57.

CATALOGUE

			<i>RIC ref.</i>	<i>Die axis</i>	<i>Weight in grammes</i>
UNMARKED PIECES					
		PAX AVG (vertical sceptre)			
1.	IMP CARAVSIVS P AVG	r. rad. dr.	-	2	4.73
		PAX AVG (transverse sceptre)			
2.	IMP C CARAVSIVS AVG	r. rad. dr.	-	7	5.69
		PROVIDE AVG			
3.	[IMP] CARAVSIVS PF AVG	r. rad. dr.	-	6	4.72
LONDON					
		<u>ML</u>			
		PAX AVG (vertical sceptre)			
4.	IMP CARAVSIVS PI AVG	r. rad. dr. cuir.	112c	2	4.54
		<u>F O</u>			
		PAX AVG (vertical sceptre)			
5.	IMP CARAVSIVS PF AVG	r. rad. dr. ?cuir.	101a or c	12	4.16
		<u>B E</u> <u>MLXXI</u>			
		PAX AVG (vertical sceptre)			
6.	IMP CARAVSIVS PF AVG	r. rad. dr.	101a, c or f	6	4.02
7.	IMP CARAVSIVS PF AVG	r. rad. cuir.	101f	6	3.69
8-9.	IMP C CARAVSIVS PF AVG	r. rad. cuir.	98c	6	5.22, 4.28
		<u>S P</u> <u>MLXXI</u>			
		PAX AVG (vertical sceptre)			
10-11.	IMP C CARAVSIVS PF AVG	r. rad. dr. cuir.	98c	6	4.06, 4.66
		PAX AVG (transverse sceptre)			
12.	IMP C CARAVSIVS PF AVG	r. rad. dr. cuir.	121c	6	5.03
		PAX AVGGG (vertical sceptre)			
13.	IMP C CARAVSIVS PF AVG	r. rad. dr. cuir.	141e	6	3.73

RIC *Die* *Weight in*
ref. *axis* *grammes*

'C' MINT

 |
 C

PROVID AVG

14. IMP CARAVSIVS PF AVG r. rad. dr. 348a 5 5.31

S|C

PROVID AVG

15. IMP C CARAVSIVS PF AVG r. rad. dr. 498a 6 4.68

S|P
 C

PAX AVGGG (transverse sceptre)

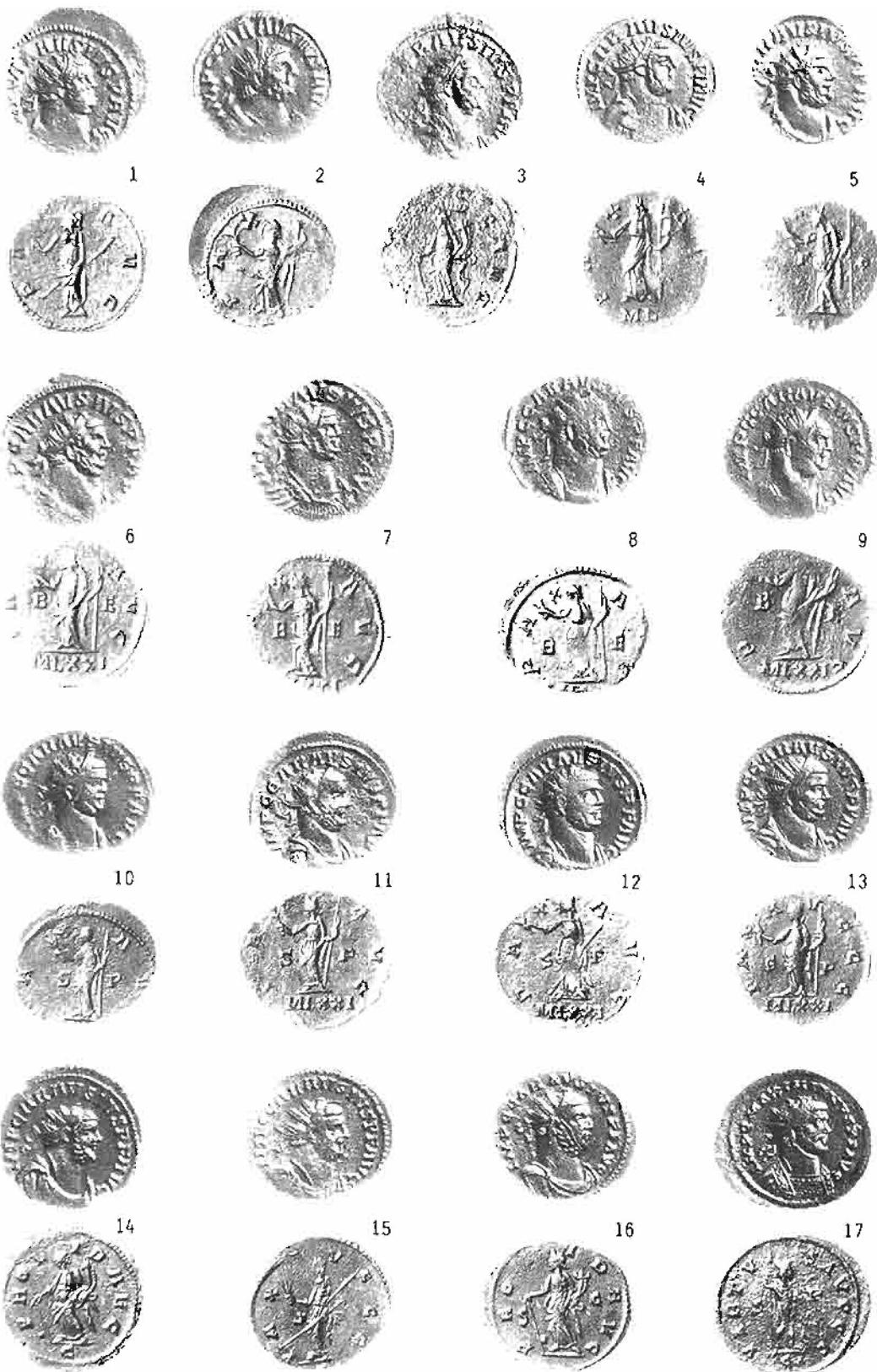
16. IMP C CARAVSIVS PF AVG r. rad. dr. 354a 6 4.03

VIRTVS AVGGG

17. IMP C MAXIMIANVS PF AVG r. rad. cuir. 30 6 4.71

NOTE: Die axes are given in terms of the clock face.

PLATE



THE BARBAROUS RADIATES FROM RICHBOROUGH

J.A.Davies

The barbarous radiates from Richborough are the largest collection of these coins from a single excavated site in the south of England. Despite the advances made towards an understanding of this strange currency, our knowledge has so far come almost exclusively from hoard studies. The analysis of site collections is an essential step towards a fuller understanding of these coins, and in particular to determine what types were in everyday use and how they circulated. Indeed, of the large number of hoards buried during the late third century containing barbarous radiates, many comprise coins which never reached circulation. Some contain coins which have come straight from a mint, still accompanied by others struck from the same dies. It is not possible to make firm conclusions about the behaviour and function of this coinage without some reference to large site collections.

Classification and composition

Where possible, the 2010¹ coins have been separated between Central Empire and Gallic Empire copies. Others, though exhibiting some sign of being irregular, but which defy identification because of corrosion and wear, are totalled separately. Both major categories list total copies of each emperor. Under the second category the vast majority of coins derive from Tetrican prototypes, and these have been sorted into reverse types, as used by Dr Sutherland.² Further categories considered under the Gallic Empire section include badly worn, partially identified coins, as well as many unusual types which deserve separate consideration and discussion.

The poor preservation of coins recovered from the site is in contrast to the condition of many hoards and is an inhibiting factor in the identification process. As well as the problem of corrosion, these site finds exhibit wear derived from vigorous circulation prior to deposition. The assemblage as a whole contains a great variety of types and represents a complete sequence from the earliest to the latest copies, which is seldom seen in a single hoard. The Richborough coins also show the usual weaknesses of this series including illiterate, or absent, legends, off-centre striking, blurring from over-use of dies and a wide variety of flan sizes and shapes. Some ninety per cent of the coins have been classified to some degree, for comparative purposes.

The types found to be most numerous are those which commonly predominate in hoards. Strangely the Central Empire as a whole, but in particular the ubiquitous Divo Claudio types, are poorly represented and are sparser than on comparable sites.³ From the Gallic Empire category coins assignable to Victorinus are again rather few. The bulk of the collection derives from Tetrican prototypes, with Pax and Spes reverses predominating, but with

List of Types at Richborough

	No. of coins	% of total
A. Central Empire types		
Gallienus	10	
Claudius 2	28	
Divo Claudio	25	
Aurelian	3	
B. Gallic Empire types		
Postumus	3	
Victorinus	77	3.8
Tetricus 1 and 2		
Aequitas	3	
Felicitas	2	
Fides Militum	16	
Fortuna	10	
Hilaritas	28	1.4
Jupiter	2	
Laetitia	31	1.5
Mars	1	
Pax	310	15.4
Pietas, Implements	49	2.4
Providentia	16	
Salus	98	4.9
Spes	183	9.1
Victoria	18	
Virtus	40	2.0
Tetricus 1, illegible rev.	123	
Tetricus 2, illegible rev.	69	
Uncertain obv., female figure rev.	174	
'Pin figure' rev.	85	
Unidentified minims	300	14.9
Unusual types	76	
C. Illegible, above minim size	230	11.4
Grand Total:	2,010	
Total number of minims recorded	697	34.7

Hilaritas, Laetitia, Pietas (sacrificial implements), Salus and Virtus also popular. One reason for the apparently low tally under Victorinus must be the lack of really distinctive reverse types used by this emperor, apart from Invictus and Pax, with transverse sceptre. His benign features and hooked nose become indistinguishable among the near caricature, poorer copies, which predominate.

The classification of the smallest coins as minims again facilitates easier comparison. Although they represent a later phase of copying⁴ they do appear to have circulated alongside barbarous radiates of larger module. However, as Mr Boon has warned elsewhere, this separation is not intended to reflect a denominational distinction.⁵ The coins termed minims, in common with this coinage as a whole, refuse to conform to any strict constraints, meaning that no rigid criteria could be used for their classification. Mr Boon has shown that weight can differ appreciably between coins struck from

the same dies.⁶ A study of the many die-linked groups present in the Sussex minim hoards from Worthing, Goring and Hove clearly confirms that there was no precise standard size or weight associated with a particular die combination.⁷ One group from the Goring hoard contains nineteen coins which share common obverse and reverse dies. They all exhibit very irregular flan shapes, of between 10mm and 15mm diameter. Thickness varies from 1.5mm to 3.5mm and weight between 0.55g and 3.40g. In the present study, 13mm has been taken as the uppermost limit, measured across the widest part of the flan, with the coin thickness and die-size also being considered. No less than 697 coins fall into this category, which is thirty-five per cent of the total barbarous radiates.

The Richborough coins exhibit the diverse range of manufacturing techniques associated with barbarous radiates.⁸ Clipping of flans is shown by numerous angular and square-shaped flans (Pl.1, 2). Some flans are clearly derived from quartered antoniniani (Pl.1, 1).⁹ A general lack of desire for precision is shown by the incompatibility of die and flan sizes (Pl.1, 4). There was also a single brockage. Die axes are totally arbitrary, indicating no attempt to align dies.

Unusual coins and internal linking

Upon initial examination, the range and variety of types present at Richborough appears almost unlimited. Apart from less-obvious hybrids that cannot be assigned to the standard groups (two such examples are shown in Pl.2, 27-8), many others show figures stylised in such a way as to warrant the term 'pin figures' (Pl.2, 34-6).¹⁰ Nine coins carry reverses which are in varying states of disintegration towards designs. Pl.1, 7, shows a Hilaritas derivative which has not quite lost its figure shape. Other distinctive types can be grouped together, each type being apparently linked by a common engraver. Because the most unusual coins are recognised in this way, and are most easily remembered, they tend to form the basis of die- and style-linked groups. A representative selection of the coins discussed is illustrated in the two plates.

One such group of four coins is characterised by a tiny, grotesque head and vigorous legend (Pl.1, 28-30). Another distinctive group, with two examples here, displays the square jaw of Claudius Gothicus on the obverse, coupled with the uncommon transverse sceptre variety of Pax on the reverse (Pl.2, 1-2). There are two examples with similar obverse in the Richborough (1931) hoard.¹¹ This hoard, housed at the British Museum, contains a few coins which display a closeness of style with the site coins, and include a single die-linked specimen.

Two unusual site coins share a common die-linked reverse, which depicts an animated male figure, wearing a halo (Pl.1, 20-1). Another internal style-group contains four coins with similar obverses (Pl.2, 6-9). A different distinctive trait seen on a small number of coins is a grossly accentuated jaw on a portrait of Tetricus II (Pl.1, 13-15). Some unusual types are represented by single examples. One such coin has a reverse legend which is a mirror image of the letters PIETAS, reading from right to left (Pl.1, 3). Another unusual reverse, of a standing figure with crossed legs, brings to mind a reverse from the Newgate Street (Paternoster Row) hoard from London (Pl.2, 30).¹² Worthy of note is a Claudius Gothicus derivative which combines a joined-hands reverse, a type used by Gallienus and by Postumus (Pl.1, 16).

Two coins depict a reverse type so far unrecorded in barbarous radiates, of a female figure seated (Pl.1, 11-12). This is a copy of the

Concordia reverse used by Aurelian and Severina. The figure is very well engraved in both cases. What can only be described as 'mint marks' appear in the exergue on three coins (Pl.1, 9-10), although one example is clearly the result of an extended barbarous legend. Professor Mattingly has identified the same phenomenon in the Sussex minim hoards, where he found five examples at Worthing and two at Goring, and also in the Lightwood and Calverton hoards.¹³ Examples of reverses with two or more figures occur occasionally in collections and have been recorded elsewhere.¹⁴ There are four examples at Richborough. Barbarous radiates with more than one figure often show prominent and subsidiary figures, but the example illustrated (Pl.1, 17) shows two well-engraved figures of equal size. This reverse type is again derived from one of several such issues of Aurelian (probably *RIC* 215 or 394) but the obverse clearly depicts the features of Victorinus. One other type illustrated (Pl.1, 8) is still rarer amongst irregular coinage. It is a version of the non-figurative Saeculi Frugifero (winged caduceus) reverse of Postumus.

There are two other reverse types present at Richborough which, though not common, recur occasionally on sites and therefore warrant some discussion. They clearly illustrate the process by which new types were derived from a limited range of originals, by successive copying. The first of these shows a female or male figure brandishing a spear and a circular shield (Pl.1, 5-6). The prototype is not immediately apparent, especially regarding the circular shield. It is likely that through the process of copying from copies, this has been derived from the wreath held by the Laetitia figure. Two examples are present at Richborough. A second, and at first glance more puzzling, type is again represented by two examples (Pl.2, 25-6). A single 'pin figure' stands centrally in a 'trough'. This may be a derivative of the sacrificial implements type, or possibly represents a debased Virtus Aug of Tetricus. Whatever the original, this derivative is present elsewhere, notably at Verulamium and in the Newgate Street hoard. The style of workmanship is obviously different in these examples and shows that this distinctive type was arrived at independently.

Finally, examples from other internal groups are illustrated. Two examples come from a group characterised by their grotesque obverse portraits (Pl.1, 31-2). Similarly, three other coins show equally poor reverses (Pl.1, 33-5). Examples of coins linked by obverse portraiture are shown by two other groups (Pl.2, 4-5, and 32-3). Similarity of reverse style is shown by another (Pl.2, 10-11).

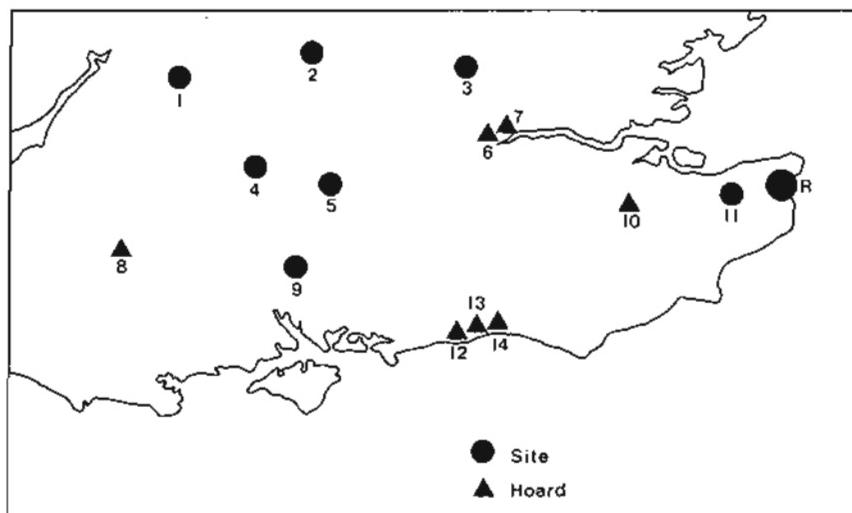
Links with other sites

Professor H.B.Mattingly has established evidence of the way in which barbarous radiates travelled widely and freely in Britain.¹⁵ His groupings, based on die-links and closeness of style in hoards, provide a reference point from which to relate the types present at Richborough.

Mattingly's Midlands - Sussex Pax Aug group is the largest numerical group of barbarous radiates established so far, known to have come from a single source.¹⁶ There are eight examples of this group at Richborough (Pl.1, 22-27). The link with the Sussex hoards is further strengthened by three coins bearing very close affinity to die-linked groups from Goring-on-Sea¹⁷ (Pl.2, 21) and two other examples resembling another group from the same hoard (Pl.2, 22-3, with a Goring example illustrated, number 24).

One reverse contains a rather angular variety of Spes, coupled with a distinctively square head on the obverse (Pl.1, 18). This coin is part of a larger group recognised by Professor Mattingly, with examples from the

Hollingbourne hoard, Kent, from the Newgate Street hoard and from Verulamium.¹⁸ Another coin shares obverse and reverse dies with an unpublished coin from Silchester (Pl.1, 19). A single minim example characterised by its high quality engraving, absence of legend and distinctly pointed features of Claudius II is part of a larger group with examples from Cirencester, and from the hoards of Newgate Street, Worthing and Mere, Wiltshire.¹⁹



Location of sites and hoards in the south of England
mentioned in the text

- | | |
|--|-------------------------|
| R. Richborough | |
| 1. Cirencester | 8. Mere hoard |
| 2. Woodeaton | 9. Winchester |
| 3. Verulamium | 10. Hollingbourne hoard |
| 4. Mildenhall | 11. Canterbury |
| 5. Silchester | 12. Goring-on-Sea hoard |
| 6. Paternoster Row
(Newgate St) hoard | 13. Worthing hoard |
| 7. Lime St hoard | 14. Hove hoard |

Examples from two other groups commonly found on sites and in hoards are present at Richborough. These types share characteristics that were initially recognised by Mattingly,²⁰ both groups being related by their obverse treatment which reduces the imperial portrait to very angular lines, usually accompanied by a V-shaped neck. Flan size lies in the range of 13–15mm diameter. The first of these groups is characterised by a ewer reverse, derived from the implements type. The ewer dominates the flan and has a large spiral handle. The legend is often reduced to a series of dashes (Pl.2, 12–13). The second group is distinguished by a male figure on the reverse, usually Sol, in a very animated stance (Pl.2, 14–16). Examples of these groups are found on many sites and hoards across the south of England.²¹ They do not cluster in any particular area, on the basis of current evidence.

The other main external links can be described. One very basic, linear obverse (Pl.2, 17) closely resembles a coin from the Newgate Street hoard (Pl.2, 18). This London link is strengthened by another coin (Pl.2, 31) which has a very similar obverse to another Newgate Street coin. A more local link is provided by a distinctive obverse engraving (Pl.2, 3) which resembles the technique used on a number of Canterbury coins. In contrast, other more distant links are present. One obverse (Pl.2, 19) is very similar to a Cirencester coin (Pl.2, 20) and one other reverse (Pl.1, 36) resembles a coin from the Calverton hoard, from Nottinghamshire.²² In relation to an internal group already described (Pl.1, 33-5) a coin from the Mildenhall, Suffolk, hoard is also of this type.²³

The range of types and styles in evidence at Richborough is very wide and undoubtedly many types will resemble others by coincidence, and a cautious approach is accordingly taken here. A more thorough consideration of style and technique is essential in order to reinforce the die- and style-links described. Despite this necessarily cautious approach, many other coins do possess likenesses to coins from other areas, and the proportion of linking will in fact be higher, which suggests that these coins were part of a circulation pool which stretched at least right across the south of England, to the Midlands and probably further.²⁴ The problems involved are shown, for example, by a number of small Richborough coins, all having very simple engravings and no legend. These coins closely resemble others from Verulamium but in the absence of specific diagnostic details, stylistic similarity in such cases is very hard to describe and to prove. On the basis of the comparative date available, the present study has so far isolated about forty external links, with a comparable number of internal links. Others undoubtedly exist, in particular amongst the heavily worn material.

Conclusions

The comparatively small proportion of die- and close style-links identified in this large site collection (approximately five per cent of legible coins) shows clearly the huge scale of output of this coinage and that the high proportion of die-linking seen in many hoards is not representative of those coins in general circulation.²⁵ However, the number of links identified is high enough to establish a coherent picture. External links occur right across the south of England but without any evident main axis of contact at present. As the amount of comparative material increases, these external links would be expected to increase accordingly.

Marryingay and Stubbing suggested a local mint at Richborough, based on evidence of internal die-linking in the 1931 hoard.²⁶ The association of the hoard with the site coins and the degree of internal linking identified may in fact reflect some local manufacture, but the small proportion of coins in question shows that if such a mint existed, it was not supplying the sole needs of this site by any means. Only about three per cent of the identifiable coins studied here are found to link internally.

Distinctive traits that have been observed in the irregular coinage of Britain which have been diagnosed as relating to local production exist in certain areas. Many such styles comprise the distinctive cruder types and minims, forming unmistakable style groups. However, evidence from Richborough reinforces Marryngay's picture of a wide circulation and as more material is studied it can be seen that many of these groups are not found solely in one area. Neither is it safe to assume that an engraver was necessarily resident locally when such a group is found.

The period between the Gallic and British Empires allows for significant developments in the production of irregular coinage, which is reflected in the enormous range of quality, size, and type of coins in question. This coinage would have been produced on a scale according to particular requirements over time, in different areas. The evidence from Richborough contributes to our knowledge of some major mint groups, which can be seen to have served wide areas of the country, and indicates a degree of more centralised production alongside the local production which occurred in many areas.²⁷

TABLE 1
Summary of internal groups

			Characteristics
1.	Obv. & Rev. die-link	See Richborough (1931) hoard report, Pl.13, 3.	
2-3.	Rev. die-link	Pin figure, with halo	Pl.1, 20-1
4-7.	Style group	Tiny head, legend	Pl.1, 28-30
8-9.	" "	Head shape	Pl.2, 4-5
10-13.	" "	Head and legend	Pl.1, 31-2
14-16.	" "	Rev. figure and legend	Pl.1, 33-5
17-18.	" "	See 2 coins from (1931) hoard report, Pl.6, 7 & Pl.11, 7.	Pl.2, 1-2
19-20.	" "	With coins from (1931) hoard	
21-23.	" "	Head shape	Pl.1, 13-15
24-26.	" "	Obv. treatment	
27-28.	" "	Head shape, beard	Pl.2, 32-3
29-30.	" "	Obv. treatment	
31-34.	" "	Head shape	Pl.2, 6-9
35-36.	" "	Rev. figure	Pl.2, 10-11

TABLE 2
Summary of external groups

1-8.	Die- & style-link	Worthing, Goring, Hove hoards, Sussex; Calverton hoard, Notts.; Lightwood hoard, Staffs.; Whitchurch hoard, Avon.	Pl.1, 22-7
9.	Obv. & Rev. die-link	Silchester, Hants.	Pl.1, 19
10.	Die- & style-link group	Hollingbourne hoard, Kent; Verulamium; Newgate St hoard, London.	Pl.1, 18
11-13.	Style group	Goring hoard	Pl.2, 21
14-15.	" "	Goring hoard	Pl.2, 22-3
16.	" "	Mere hoard, Wilts.	
17.	" "	Various, especially Verulamium	
18.	" "	Various, especially Newgate St hoard	Pl.2, 17
19-20.	" "	Various	Pl.2, 12-13
21-25.	" "	Various	Pl.2, 14-16
26.	" "	Calverton hoard	Pl.1, 36
27.	" "	Woodeaton, Oxon.	
28.	" "	Cirencester, Gloucs.	Pl.2, 19
29.	" "	Lime St hoard, London?	
30-34.	" "	Various Verulamium coins.	
35.	" "	Newgate St hoard	Pl.2, 31
36-37.	" "	Mildenhall, Wilts.	
38.	" "	Winchester?	
39-40.	" "	Various, especially Gorhambury.	
41.	" "	Canterbury, Kent.	Pl.2, 3
42-44.	" "	Mildenhall hoard, Suffolk	Pl.1, 33-5

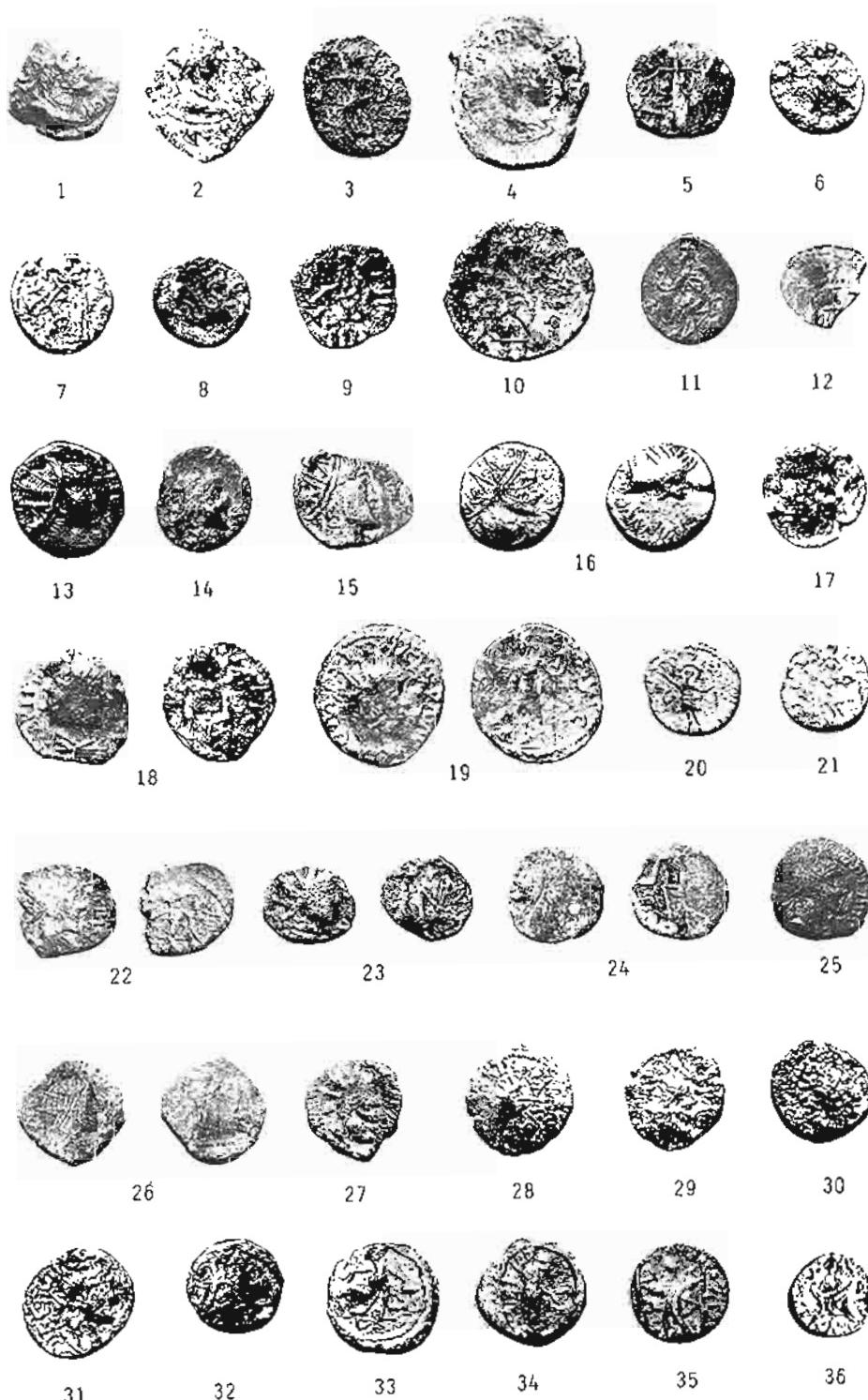
NOTES

I am extremely grateful to Professor H.B.Mattingly, Dr M.G.Fulford and Julie Gardiner for commenting on earlier drafts of this paper. I would also like to thank Dr R.M.Reece and Dr C.E.King, for their assistance during the preparation of the report, and staff of the Department of the Environment at Fortress House, in particular Mr N.Moore and Dr C.J.Young.

1. R.Reece, 'The Roman coins from Richborough - a summary', *Bulletin of the Institute of Archaeology*, 18 (1981), 49-71. Reece lists 1966 barbarous radiates whereas the figure in this present report includes others from the heavily abraded material.
2. C.H.V.Sutherland, *Coinage and currency in Roman Britain* (1937), pp.126-53.
3. The author has studied comparative assemblages from over 120 sites in the south of England. Central Empire derivatives normally form close to ten per cent of total imitations on sites. The low percentage here is not a reflection of the numbers of official types on the site (see Reece in note 1).
4. G.C.Boon, 'The counterfeiter's deposit', in *Coygan Camp*, edited by G. Wainwright (Cardiff, 1967), pp.119-20.
5. G.C.Boon, 'Counterfeit coins in Roman Britain', in *Coins and the Archaeologist*, edited by J.Casey and R.Reece (B.A.R. 4, 1974), p.115.
6. Boon, 'Counterfeit coins', p.118.
7. For the publication of these hoards, see H.Mattingly, 'The Hove radiate hoard', *Sussex Notes and Queries*, 7 (1939), 234-39; G.D.Lewis and H.B. Mattingly, 'A hoard of barbarous radiates from Mill Road, Worthing', NC 7th ser. 4 (1964), 189-99; H.B.Mattingly, 'A hoard of "barbarous radiates" from Goring-on-Sea', *Sussex Arch. Colls*, 105 (1967), 56-61.
8. Boon, 'The counterfeiter's deposit', p.126.
9. Some clear examples of this are illustrated by G.C.Boon in 'A Roman counterfeiter's den', *Proc. Univ. Bristol Spelaeological Soc.* (1972), Pl.4.
10. A term employed by H.B.Mattingly.
11. H.Mattingly and W.P.D.Stebbing, 'The Richborough hoard of "radiates", 1931', *American Numismatic Soc. Notes and Monographs*, 80 (1938), Pl.6, 7 and Pl.11, 7.
12. H.B.Mattingly, 'The Paternoster Row hoard of "barbarous radiates"', NC 7th ser. 7 (1967), Pl.7, 24.
13. Mattingly, 'Barbarous radiates from Mill Road, Worthing', p.191. The Lightwood and Calverton examples are discussed in his 'The Lightwood hoard and the coinage of "barbarous radiates"', *N. Staffs. Jour. Field Studies*, 3 (1963), 26.
14. P.V.Hill, 'Three barbarous overstrikes', NC 6th ser. 8 (1948), 93-95. Mattingly, 'The Lightwood hoard', p.24, with note 16 and Pl.2, 34.
15. Mattingly, 'The Lightwood hoard', pp.19-36; and 1964.
16. Mattingly, 'Barbarous radiates from Mill Road, Worthing', Pl.16, 34-58, and description on pp.198-99.
17. Mattingly, 'The Paternoster Row hoard', Pl.1, 5-7.
18. Mattingly, 'The Paternoster Row hoard', Pl.7, 36 and description p.66. See also, 1964, Pl.18, 101. Verulamium example illustrated in NC 6th ser. 8 (1948), p.89, no.5.
19. The Mere example is illustrated in H.Mattingly, 'A hoard of barbarous radiate coins from Mere, Wilts.', NC 5th ser. 14 (1934), Pl.10, 38.
20. Mattingly, 'Barbarous radiates from Mill Road, Worthing', p.192 and Pl. 16, 31-33. Also present in the Lightwood and Calverton hoards. See note 13.

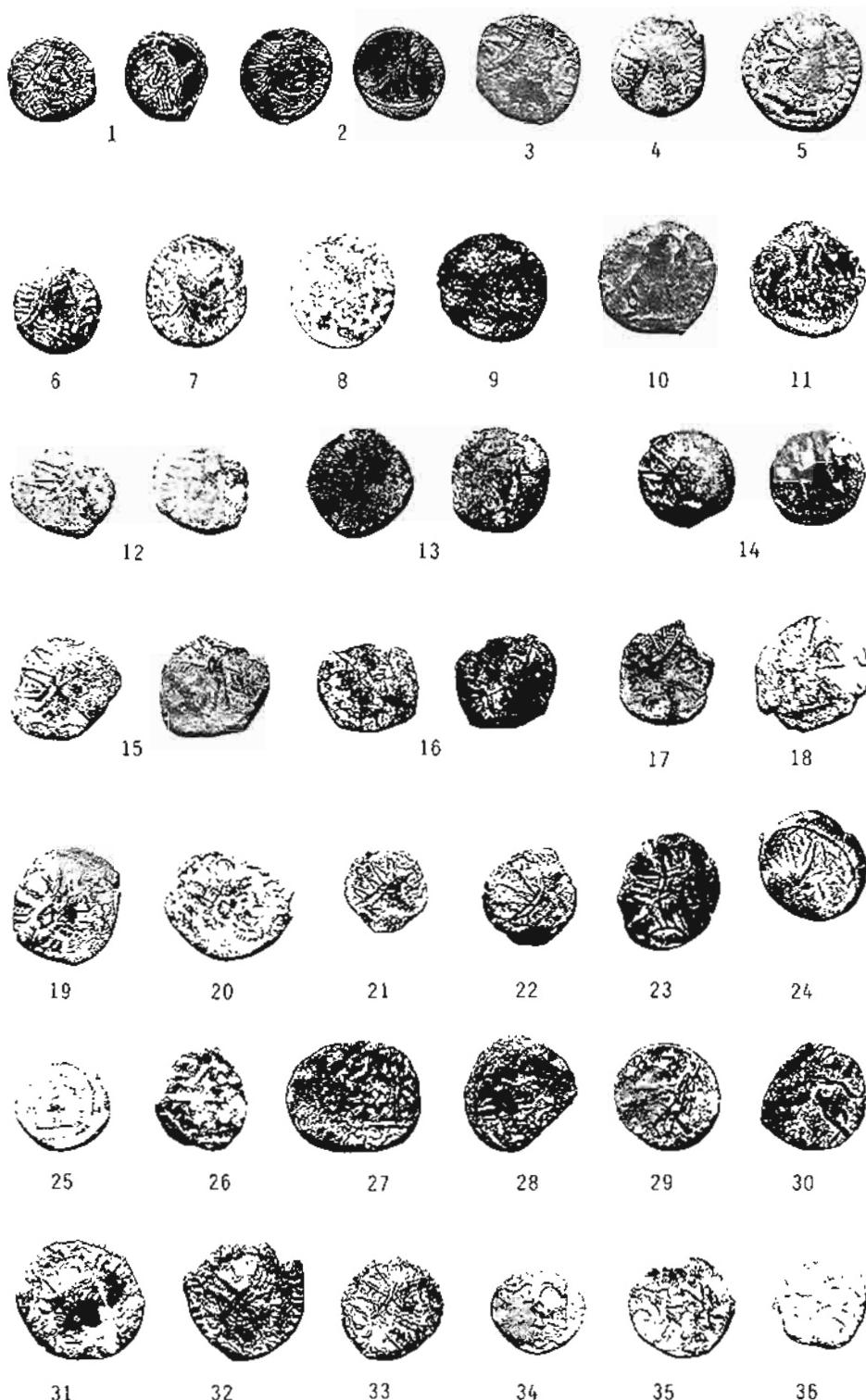
21. Personal inspection by the author. See note 3.
22. H.B.Mattingly, 'Two hoards of Roman coins from Calverton', *Trans. Thoroton Soc. of Notts.*, 64 (1960), Pl.1, 14.
23. A.Robertson, 'A Roman coin hoard from Mildenhall, Suffolk, NC 6th ser. 14 (1954), Pl.5, 30.
24. Coins from English sites and hoards are known to die-link with continental hoards. See Mattingly, 'The Lightwood hoard', p.24; J.Lallemand and M.Thirion, *Le Trésor de Saint-Mard 1* (Wetteren, 1970), pp.67-72; Boon, 'Counterfeit coins', and 'Counterfeiting in Roman Britain', *Scientific American* (1974), 120-30. The author knows of others, which will be discussed in future work.
25. Professor Mattingly has encountered a similar situation among the 370 site finds from Winchester (forthcoming report on the barbarous radiates from Winchester).
26. Mattingly and Stebbing.
27. Boon, 'The counterfeiter's deposit' and 'A Roman counterfeiter's den'. H.B.Mattingly, 'A hoard of barbarous radiates from Sprotbrough, South Yorks.', *NC* 142 (1982), 21-33.

PLATE 1



All coins shown are from Richborough

PLATE 2



No.18 is from the Newgate St hoard, London; no.20 is from Cirencester; no.24 is from the Goring-on-Sea hoard; all others are from Richborough.

A COENWULF PENNY BY WIHTRED FROM BIDFORD-ON-AVON, WARWICKSHIRE

Wilfred A. Seaby

Discovery and Site

It is not very often that a Mercian penny, which seems to be no more than a chance loss, turns up in this country, while hoards containing coins of Coenwulf recorded during the past two or more centuries can be counted on the fingers of both hands.¹ Thus it is gratifying to report the discovery of such a piece during investigations along the route for the new inner relief road at Bidford. Excavations were just concluding in 1978 by archaeologists working for the Warwickshire Museum and the Department of the Environment under the direction of Miss Susan Hirst, when the coin was found unstratified. It lay at the top of B5 Roman quarry and at the base of the plough soil in an area between the large pagan Saxon cemetery² and the fringes of a later Saxon settlement site³ (NGR: SP09915197).

There was no indication of a deposit at the spot where the coin lay and indeed Saxon hoards from anywhere within the Middle Anglian and Hwiccan regions are at present unknown, partly due no doubt to the fact that during the ninth century Danish raids did not penetrate into the region of the western midlands.⁴ However, even single finds of coins are scarce in this general area, although discoveries of sceattas have occasionally occurred.⁵

An Offa penny by Deimund, now in the Leicester Museum, was found at Wellingborough, Northamptonshire, before 1875. This with a tribrach penny of Coenwulf by the moneyer Diola, housed in the Museum and Art Gallery at Shrewsbury, probably a Shropshire find but of unknown provenance, and a Cuthred penny of Eaba unearthed with a decorated pin of iron near Brixworth, Northamptonshire, about 1877, now in the Northampton Museum, seem to be the only examples of this denomination, predating Burgred and Alfred which are recorded as being permanently housed in local museums.⁶ To be added to these are two of Coenwulf's tribrach coins by Ibba, one discovered at Breedon-on-the-Hill, Leicestershire, the other somewhere in Shropshire⁷ as finds also from the central and western midlands. If, however, one extends the range eastwards there are coins of Offa recovered from Castor and Newton Bromswold, and a penny of Aethelheard, archbishop of Canterbury (798-805), found at Brixworth, all in Northamptonshire.⁸ Others include two of Offa, from Stilton, Huntingdonshire, and Mentmore, Buckinghamshire,⁹ and one of Ceolwulf I by Aelhun at Toddington in Bedfordshire.¹⁰ Southwards, Oxford city has produced a penny of Archbishop Jaenberht (pre-792),¹¹ a garden near Deddington Castle, Oxfordshire, one of Offa by Eadhun,¹² while at Eynsham Abbey, only a few miles north-west of Oxford, a penny of Queen Cynethryth by Eoba as well as an anonymous coin in the Kentish royal series (c.821-23) were recovered in 1834 and 1854 respectively.¹³ But the site nearest to Bidford, where a coin of Ecgbeorht of Wessex by the moneyer Tidbearht was found in 1957, is Lower Slaughter, some twenty-five miles away

in Gloucestershire.¹⁴ Quite recently an Offa portrait penny by Alhmund has turned up at Trusley, Derbyshire, being, it is believed, the first recorded early Mercian piece for that county.¹⁵

It is no part of this note to discuss or indeed anticipate findings from trial excavations which have taken place at Bidford-on-Avon during four or five seasons since 1971, for archaeological investigation is still in progress. But in general terms it is perhaps pertinent to remark that a coin which in date falls mid-way between the known Anglo-Saxon community of the sixth century and the royal manor established here by the eleventh century¹⁶ must have a certain significance. Evidence from pottery and other finds of the Romano-British period¹⁷ attests the early occupation of this site which lies astride the Ricknield or Buckle Street, running south from Alcester to join the Fosse Way near Lower Slaughter, at the point where this Roman road crosses the River Avon, formerly by ford as the name implies, but in later medieval times by bridge.¹⁸

Exploitation of salt from Droitwich and elsewhere in the Salwarpe valley goes back to the later phases of the Iron Age, for the Belgic peoples needed it in their capitals; and the industry remained an important one not only during the Roman period but all through the middle ages, manufacture in fact continuing until the present century.¹⁹ So a river crossing on a well-used route for pack-horses travelling south to the Cotswolds and beyond, with trains proceeding north with wool and other commodities, may have been reason enough for the establishment here of some permanent trading post. But unlike Stratford, which was the alternative crossing of Avon, Bidford remained a village or small town without borough status, although obtaining a market grant in 1220.²⁰ Thus a penny of the early ninth century is not entirely to be unexpected where traders and travellers were continually passing through, even though this area of Mercia lies about 150 miles from the mints then striking in Kent and East Anglia.

Classification of Coin and Dating

A full description is given here since the coin appears to be a new variety by this moneyer although closely associated with four other coins mentioned below. It is illustrated at the end of this article.

Obverse. COENVVLF RE+. Bust right, diademed and robed, cutting through inner linear circle; outer beaded circle.

Reverse. +.:PIN.TR.E:.D. Small cross pattée, set saltirewise, within inner beaded circle.

Diameter 20mm, die ratio 30°. Decayed around almost half the edge where the flan is thin; broken across bust and recently repaired. Otherwise in very fine condition. Weight 1.22g (18.9grs).

Two things are noticeable in the inscription on the obverse: the absence of the ethnic, the initial cross being synthesised with the final letter of REX,²¹ and the retrograde N in addition to the retrograde and inverted F for L. On the reverse the moneyer's name using N for H is set out boldly using Roman capitals with slight serifs, single or groups of pellets arranged arbitrarily in the spacings of the letters. Wihtred's signature in this form is found on four other Coenwulf coins, each having a different device within the inner beaded circle: inverted A between pellets (two die duplicates); small tribrach pattée with pellets in angles; star, the six limbs pattée; saltire cross pattée with pellets in angles.²²

The number of coins recorded for this East Anglian moneyer is now twenty-three, possible twenty-four,²³ out of probably fewer than a thousand

Saxon pennies known to have survived from the period c.775 to 825,²⁴ or approximately 2.5 per cent of the total. Wihtred's coinage, assuming all of it was issued by one man, covers the later issues of Offa, the few coins put out by Eadwald of East Anglia, the whole of Coenwulf's sovereignty over Mercia and at least the first year of Ceolwulf I. This period of effective minting lasted some thirty-five years, c.787-822, and suggests the moneyer worked well into his sixties, in fact he may have been older than this when he died or retired.²⁵

As with Canterbury, Rochester and London, the East Anglian mint, whether sited at Thetford, Ipswich or elsewhere, seems unlikely to have had continuous striking during Coenwulf's reign. In fact there seems good reason to suppose that the bulk of this coinage was issued during the last ten, perhaps the last five years of his rule. For example, Wodel, another East Anglian, used the same reverse die on coins struck for Coenwulf and Ceolwulf and the obverse die of the latter is found to couple with another reverse type for Ceolwulf, so the dating of these three pieces must surely be 821-22. Since Wihtred also struck coins using similar reverse designs as seen on no fewer than five of his surviving pieces with one further closely allied reverse, we can be reasonably certain that a fair proportion of his output must be of the same date.²⁶

It seems the substantive type B, having Saxon M with contraction mark for Mercia as central device on obverse, and on reverse a large voided tri-brach moline, in issue between 798 and 805 at the Canterbury and London mints,²⁷ was not produced by any of the East Anglian moneymen; although Wihtred on one of his portrait issues did use a small single-armed tribach as central motif.²⁸ Even though this may be a faint echo of the early group the gap between his coinage for Offa and Eadwald and that for Coenwulf would seem to be of several years duration; for to date no coins, comparable to those of his compatriot Lul, which link the non-portrait group of the late eighth century with his portrait coins for Coenwulf²⁹ have so far been recovered.

NOTES

I wish to thank those without whose help this paper could not have been written: Miss Sue Hirst and Miss Helen Maclagan, who brought the coin to my notice; Miss Marion Archibald, Mr Mark Blackburn, Mr Christopher Blunt and Dr Michael Metcalf; also Mr David Symons and Mrs Jane Moore.

1. D.M.Metcalf, 'Offa's Pence Reconsidered', *Cunobelius* (1963), 42, gives 21 recorded single finds of Coenwulf's coins (and 9 of his brother Cuthred) based on lists in the possession of Mr Blunt. M.Dolley, *SCBI* 6. *The Hiberno-Norse Coins in the British Museum*, pp.48-9, hoards Nos. 1 (T125), 2 (T-), 4 (T117), 5 (T366), 7 (T328), 9 (T109), 10 (T110), 11 (T123), 50 (T362). Numbers in parenthesis are those in J.D.A.Thompson, *Inventory of British Coin Hoards A.D.600-1500* (1956).
2. J.Humphreys, 'An Anglo-Saxon Cemetery at Bidford-on-Avon, Warwickshire', *Archaeologia*, 73 (1923), 89-116, and 74 (1924), 271-88; *Transactions of the Birmingham Archaeological Society*, 49 (1923), 16-25, frontispiece and pls.II-V.
3. P.Rahtz, 'Gazeteer of Anglo-Saxon domestic settlement sites' in *The Archaeology of Anglo-Saxon England*, (1981), p.409; W.Ford, 'Bidford-

- on-Avon', *West Midlands Archaeological News Sheet* (CBA Group 8), 14 (1971), 21; L.E.Webster and J.Cherry, 'Medieval Britain in 1971' *Medieval Archaeology*, 16 (1972), 163; T.Slayer, *A History of Warwickshire* (1981), p.28.
4. Sir Frank Stenton, *Anglo-Saxon England*, second edition (1950), pp.241-42. The one serious inroad recorded seems to have been in the country around the Wrekin during 855.
 5. S.E.Rigold and D.M.Metcalf 'A Check-list of English Finds of Sceattas', *BNJ* 47 (1977), 31-52, including distribution maps for eight classes. Many of these coins have been recovered in the central and south midlands but there are only six or seven specimens from the region of the western midlands including those found at Coventry, Worcester and Compton, Staffs. See also D.M.Metcalf, 'Sceattas from the territory of the Hwicce', *NC* (1976), 64-74; and 'Monetary Affairs in Mercia in the time of Aethelbald' in *Mercian Studies*, edited by A.Dornier (1977), map on p.92, covering all finds of sceattas in England.
 6. A.J.H.Gunstone, *SCBI* 17. *Ancient British, Anglo-Saxon and Norman Coins in Midlands Museums*, Nos.84, 85 and 95.
 7. C.E.Blunt, C.S.S.Lyon and B.H.I.H.Stewart, 'The Coinage of Southern England, 796-840', *BNJ* 32 (1963), 51, No.16; R.C.Lockett Sale Cat. English pt.3 (1958), lot 2658. See also Metcalf, *Cunobelin* (1963), 43.
 8. P.W.P.Carlyon-Britton Sale Cat. (1918), lot 1603; Metcalf, *Cunobelin* (1963), 51; *VCH Northamptonshire*, I (1902), p.255.
 9. Lockett, English, pt.1 (1955), lot 348 (= *SCBI* 1. *Fitzwilliam Museum*, No. 386); *BMC* 34.
 10. Lockett, English, pt.1, lot 381; *NC* new ser. 5, 168; Blunt, Lyon and Stewart, p.61, Cl.21(a).
 11. Lockett, English, pt.3 (1958), lot 2632 (= Blunt 132); found by 1866.
 12. *Journal of the British Archaeological Association*, 22 (1866), 245 (similar to Blunt 39); Metcalf (*BNJ* 40 (1971), 171-72) proves this coin is *SCBI* 1. *Fitzwilliam Museum*, No.389, ex Carlyon-Britton.
 13. R.P.Mack collection, *SCBI* 20, Mack, No.575; Blunt, Lyon and Stewart p.66, An.7.
 14. Blunt, *BNJ* 28 (1955-57), 467 and pl.XXVII, 1. A penny of Coenwulf by Beornfreth (Cn.23) in Stow-on-the-Wold Museum might also be mentioned as a possible local Cotswold find.
 15. Information from Miss Archibald (19 May 1982) who has kindly allowed this record to be included here.
 16. *Domesday Book: Warwickshire including Birmingham*, edited by John Morris (1976). I. Land of the King (William) 238b (3) Bidford (-on-Avon). King Edward held it.
 17. S.Hirst, 'Bidford-on-Avon, 1979', *West Midlands Archaeological News Sheet* (CBA Group 8), 22 (1979), 54-55.
 18. Originally built in the early fifteenth century, some 200 yards below the ford, but much repaired in 1449 and during succeeding centuries (see *VCH Warwickshire*, III (1965), p.50).
 19. For a brief survey of the salt industry at Droitwich, both archaeological and historical, see *West Midlands Archaeological News Sheet* (CBA Group 8), 22 (1979), 83-91. Charters mentioning salt workings go back to the

mid-seventh century. See also Metcalf, *Mercian Studies*, p.91, who, however, notes that no sceattas have so far been recorded from Droitwich itself; and 'Sceattas from the Territory of the Hwicce' NC (1976), 68.

20. *VCH Warwickshire*, III (1965), p.50; Slayter, map, p.54.
21. The use of + for x in the royal title occurs twelve times on a known twenty-one obverses by this moneyer but the absence of the ethnic is only found on two other pieces. This form of conflation appears to be exceptional until the time of Ceolwulf I and Beornwulf (e.g. J.J.North, *English Hammered Coinage*, 1, pl.IV, 33-Edgar).
22. Blunt, Lyon and Stewart, (note 8) p.59, Nos.103, 104, 105, 106 (= die duplicate of Lockett 2655) illustrated on pl.VI.
23. C.E.Blunt, 'The Coinage of Offa', in *Anglo-Saxon Coins*, edited by R.H.M.Dolley (1961), p.59 note 1 cites for this moneyer three coins of Offa's group II and four of Offa's group III, while Blunt, Lyon and Stewart, pp.59, 62, and 68, list eleven coins of his for Coenwulf, two for Ceolwulf I, and one for Eadwald of East Anglia. To these can now be added a further coin of Offa's group II (Glendining, 6 June 1979, lot 361) and the Coenwulf coin discussed here; also, perhaps, a further coin of Coenwulf with reverse inscription WIGHER (*SCBI 2. Glasgow*, 348).
24. Based on calculated figures given in various papers by Blunt, Metcalf and others, with allowance for a number more pieces recorded in recent years.
25. The possibility of, say, father and son, bearing the same name, and working consecutively at the one mint cannot be entirely ruled out. See also Metcalf's comments on duplication of moneymen's names in *Cunobelin* (1963), 40.
26. This is admirably demonstrated by Blunt, Lyon and Stewart, pl.VI, Cn. 113, Cl.31, 32 (Wodel), and Cn.109, 110, Cl.30 (Wihtred).
27. Blunt, Lyon and Stewart, pp.51-2.
28. Blunt, Lyon and Stewart, pl.VI, Cn.104.
29. Blunt, Lyon and Stewart, pl.V, Ea.2, Cn.97, Cn.98.



A SHIP-TYPE OF ATHELSTAN I OF EAST ANGLIA

Marion M. Archibald

A penny of Athelstan I of East Anglia with a ship-type obverse unprecedented in the Anglo-Saxon broad-flan coinage was found with a metal detector by Mr A.R.Langwith at West Harling, Norfolk about eight miles north-east of Thetford, in 1977.. When first shown at the Castle Museum, Norwich, the coin was already in two pieces and had been superficially cleaned. The bent-over edges of the fracture confirm that the coin had been folded when found and had been broken in an attempt to flatten it. I am grateful to the Keeper of Archaeology, Miss Barbara Green, for inviting me to study the coin and for generously allowing me to publish a detailed discussion of it here, as well as for providing, in conjunction with her colleague, Mr.Tony Gregory, much helpful information about the background to the find and its location.¹ I am equally indebted to Mr K.A.Howes, Senior Conservation Officer working in the Department of Coins and Medals for his expert cleaning and mending of the coin and to Dr M.S.Tite and other colleagues in the British Museum Research Laboratory for the analysis of its metal-content quoted below.

Illustrated natural size and x 2 on the plate, the coin is of very rough style and may be described as follows:

- Obverse: EDELSTAN RE+ within pelleted outer circle; no inner circle; in centre, a ship with rudder at the right-hand side having triple ropes extending from the cross-topped mast to the extremities of prow and stern
- Reverse: +EA+ / dgAR within pelleted outer circle; within pelleted inner circle, an uncertain design of irregular pellets (rosette or cross)
- Mint: uncertain. Moneyer : Eadgar. Metal : ninety-four per cent silver (see below)
- Weight: 1.27g (19.6gr). Diameter : 20mm. Die axis : c.0°
- Reference: J.J.North, *English Hammered Coinage*, second edition (London, 1980), I, No.449/1.
- Disposition: Acquired by the Castle Museum, Norwich

The moneyer Eadgar worked in East Anglia for three Mercian kings, Ceolwulf I, 821-23, Beornwulf, 823-25 and Ludica, 825-27, and also for Athelstan I but not for the latter's successor, Aethelweard. Athelstan is not mentioned by name in the documentary record but his long-accepted identification as a king of East Anglia was suggested by the REX ANG legend on one of his issues and confirmed by the presence of his moneyers in a chain which leads to those of the historical Edmund, 855-70. Numismatists have in recent years dated his reign to c.827-c.840 on the basis of

hoard evidence and the place of his coins in the moneyer- and type-sequence of the related series for the kings of Mercia, Wessex and Kent.² There can be no doubt that the ship penny is to be attributed to Athelstan I of East Anglia but it stands typologically apart from all his other coins whose conventional Anglo-Saxon types fall into a series of well-defined groups. Its inferior style also differentiates it from the rest of Athelstan's issues, some of which are from rather rough dies but none of them are quite so crude. This clear disassociation, even from coins of the same moneyer, suggests that the ship penny was struck at a different period³ from the other known coins of Athelstan and so it is necessary to examine the types and epigraphy in detail for any light which they may shed upon its chronological position.

The obverse legend is of normal circumscription type with the cross at the mast-head so positioned as to serve additionally as the initial cross. Although rough in style, it is set out entirely in Roman capitals engraved onto the die but adumbrating at times the effect of punched letters. There are none of the runic letters regularly found on Athelstan's dies. The second letter is left as a D without the cross-bar needed to convert it into the thorn required by the name, a feature also noted on other groups of coins in this reign. The obverse type of a ship is clearly derived from the similar vessels shown on the reverses of the rare Carolingian deniers of Charlemagne, 768-814, and Louis the Pious, 814-40, struck at Dorestadt (M&G 105 and 330) and Quentovic (M&G 121a and 351), the important trading posts at the mouths of the Rhine and Canche respectively.⁴ The issues of Charlemagne are less likely to have provided the model since the ships on the two known examples are consistent in being rudderless, with single ropes springing from fairly close to the base of the mast. The shape and fittings of the Athelstan ship are most closely paralleled on coins of Louis the Pious from Dorestadt (e.g. M&G pl.XI, 330) which are in fact the only Carolingian ship deniers to have survived, and, presumably, to have been struck, in any numbers. It may be noted that the oars shown on the ultimate Roman prototype⁵ and reproduced on the Carolingian dies as oars and/or waves are lacking on this English example. The ship type was introduced some time during the last years of Charlemagne and although the issues of Louis the Pious cannot be dated precisely, they are securely attributed to early in his reign. At what stage the English copy appeared is difficult to assess. The ship type itself demonstrates the long interval that can divide a coin-design from its prototype, but it is most probable that the English coin was produced while the Carolingian ship-type was still a significant presence in the circulating medium of the Frankish kingdom and its trading neighbours. This was during the earlier part of the reign of Louis the Pious before the ship type, with its predecessors and contemporaries, became heavily outnumbered in circulation by the large issues of two-line and temple types made during his middle and later years. Some examples did however survive long enough to be included in hoards buried into the early 840s.⁶ The date of the other group of imitations of the Carolingian ship-type, produced in Scandinavia, is equally difficult to resolve: while some scholars would prefer a later date, Professor Malmer, who has made the most detailed recent study of the question, places their issue c.825.⁷ Thus, although, as far as the evidence of its obverse type is concerned, the date of the ship-type must remain open, production earlier rather than later in Athelstan's reign seems more probable.

Turning to the reverse, it is of even rougher style than the obverse, with mixed Roman and minuscule engraved letters of unequal size. The two As of different type, the first, straight-barred and the second, chevron-barred, are both normal forms on dies of this period and are used together on the same die on other coins of Athelstan by the moneyer Eadgar (BMA

231-2). The use of minuscule letters, such as the d and g found on this die, are unusual at so late a date. They are used not infrequently in the coinage of Offa, 757-96, but become less common as the ninth century progresses. They are then characteristic of, but not confined to, the East Anglian series. Among the minuscule ds found on coins of several moneyers for Coenwulf, a letter exactly like those on the ship penny occurs on his late East Anglian coins by the moneyer Wodel (Cn.111-13, especially 112). The only instance of precisely this d on the coins of Ceolwulf is on a die of Wodel (Cl.31) so similar that it may be a die of Coenwulf's re-used.⁹ This is especially likely since this coin is the only known example of the voided long-cross-crosslet type, common for Coenwulf, appearing for his successor. A minuscule d of slightly different form with a hooked instead of a straight upper limb is used on both of the known dies of very rough style for Ceolwulf by Eadgar, the moneyer responsible for the ship penny (Cl.27). No minuscule d of any form is known for Beornwulf, Ludica or, otherwise, for Athelstan. The evidence for the minuscule g is less clear-cut, partly because there are simply fewer opportunities for it to occur since G is a much less common letter in the names of moneyers working at this time. In particular for Coenwulf, the chances of finding the g are reduced because Eadgar is not known to have struck any coins in his reign. The minuscule form of the g on the ship penny cannot be matched exactly but similar forms are used on the two-line dies of Eadgar for Ceolwulf (Cl.27) already mentioned and on his equally rough dies for Beornwulf (Be.5 and BMC pl.IX, 6, then wrongly attributed to Ceolwulf, BMC 104, the latter showing a hooked version cognate to the d on the same two-line type for Ceolwulf, Cl.27). On the two dies of Eadgar for Ludica (L.1a and 1b⁹) one G is perfectly Roman and the other is shaped like a B. The only g on a coin of Athelstan which is at all similar has a short, straight upper limb instead of a longer sloping one and appears on one of the rough-style coins with blundered legends by the moneyer Regenhore (BMC 15 reading retrograde, R E g N H R E). While other non-Roman forms of g are found on some of the more careful dies of the moneyer Eadgar for Athelstan and on those of Eacga for Beornwulf, they are of quite a different shape and not relevant to the present discussion. Otherwise the Gs on Athelstan's coins are Roman.

While the coins of Athelstan himself are relatively common with, in total, many dies for moneyers, including Eadgar, whose names contain D or G, it is accepted that the coins of both Beornwulf and Ludica are very rare but there are two dies for each of these kings by Eadgar as well as dies of other moneyers with D in their names or, less often, G (four dies of Eacga for Beornwulf only), where the abnormal letter forms would have had a chance to appear. To sum up the evidence of the epigraphy, the closest parallels for the distinctive letters on the reverse of the ship penny are to be found on the coins of late Coenwulf and Ceolwulf. Coins of Beornwulf and other types of Athelstan have some, usually less direct, points of contact and those of Ludica have none.

Although the reverse of the ship penny is essentially a circumscription type, the legend has been laid out almost like a two-line type so that it must be read, as shown on the plate, no.2, with the coin turned c.45° anti-clockwise from its true axis, in two arcs, first along the upper sector of the circumference, E A, and then along the lower sector, d g A R. This lay-out of a circumscription legend also occurs on the gold piece in the name of Ciolheard probably struck during the reign of Coenwulf¹⁰ and a similar compromise between a line-type and a circumscription-type is found on rough-style dies of basically three-line type for Ceolwulf by the moneyer Hereberht (Cl.25). The legend on the present coin is punctuated by a cross at each side, one between the last and the first letters which also acts as

the initial cross and another between the A and the d. The placing of an additional cross in the middle of the legend is found on the very rough style coins of Fotred for Coenwulf (Cn.100) and Ceolwulf (Cl.28).¹¹ The placing of one cross in the middle of the legend instead of at its start is known for Beornwulf on one cross-crosslet die by Eacga but this feature is not known for Ludica or, otherwise, for Athelstan. The adumbration of a two-line type on the ship penny brings to mind once again the rough-style two-line type coins by the moneyer Eadgar for Ceolwulf (Cl.27) and Beornwulf (Be.5) whose dies have various arrangements of crosses, stars and pellets between the two lines of the moneyer's name. For Ludica, Eadgar's dies are both of cross-crosslet type and in somewhat better style (L.1a and 1b); for Athelstan, his dies conform to those of other contemporary moneyers both in their better style and in their types where two line designs are not used and the central design is never constructed of pellets in the way found on the ship penny. In the latter respect, and in general style, the ship-type penny is particularly close to a late circumscription type penny of Coenwulf by the moneyer Hereberht (Cn.102) whose next issue in the name of Ceolwulf (Cl.28) has affinities with the present coin discussed above. Although such considerations of general style are always subjective, the ship type has more in common with coins of late Coenwulf or Ceolwulf than with even those of Beornwulf, and certainly than it has with those of Ludica and the rest of Athelstan's reign. Looking also at the whole sequence of the dies of the moneyer Eadgar, there is a progressive improvement in the style from the very rough dies for Ceolwulf and Beornwulf, through the better, but still fairly rough dies, for Ludica to the neater ones for Athelstan. The typological sequence follows a similar progress: two-line types never used by other moneyers for Ceolwulf and Beornwulf are replaced under Ludica and Athelstan by types which conform to the normal pattern of issues by other contemporary moneyers. The ship type which stands apart from this sequence would be most acceptably accommodated as the earliest extant of Eadgar's coins, supporting the other indications that it should be placed at the head of Athelstan's issues also.

Metrological evidence would have been helpful on the question of dating but unfortunately very few analyses of early ninth-century coins have been published. There is no data at all for Ceolwulf, Beornwulf or Ludica and only one coin of Athelstan has been analysed. The available information¹² is set out in the table below where 'trace' denotes less than 0.1 per cent.

Coenwulf			Athelstan	
	Diola	Eanmund	ship type	Brooke type 4
	%	%	%	%
silver	98.0	96.0	94.0	87.5
copper	2.0	3.3	4.0	6.6
gold	0.1	0.4	0.2	0.6
lead	0.1	0.7	1.0	1.0
zinc	trace	trace	trace	-
iron	-	-	-	0.2

The finer metal of the ship penny appears to associate it with the coins of Coenwulf rather than with the baser coin of Athelstan. Diola and Eanmund are both London moneyers in Ceolwulf's early period before c.805 and so although the close concurrence of the silver content of their coins is suggestive of an over-all standard, there is no way of knowing from this data whether the East Anglian issues at the end of Coenwulf's reign, which alone are relevant here, conformed to this standard. Similarly there is no guarantee that all of Athelstan's other coins, or particular groups among

them, were of a consistently lower standard as suggested by this isolated analysis. It is however instructive to note that it was during the issue of the temple type, first struck in the latter part of the reign of Louis the Pious, that the Carolingian standard fell away from the very high level which it had more or less maintained since the Reform of Pepin in 755 to something more like the sterling standard of 92.5 per cent fine.¹³ When or how consistently this happened has not as yet been determined, the problem being made more difficult by the continuation of coins in Louis's name after his death. The figures above, inadequate although they are, suggest that a similar lowering of the metal standard may have taken place in the English coinage about the same time. The weight of the ship penny is not diagnostic but, despite its Carolingian type, it is on the lower English, rather than the higher Frankish, weight-standard.

To sum up, the balance of the numismatic evidence suggests that the ship penny is earlier than all of Athelstan's other known coins and that its most acceptable place in the sequence may be just after the death of Coenwulf in 821.

It is now necessary to consider how this hypothesis might be reconciled with the historical record. The model suggested by the numismatic evidence is that Athelstan might have made an earlier and only briefly successful bid for power in East Anglia following the death of Coenwulf in 821. This may be compared with the very similar pattern of events which followed the death of Offa in 796 when Eadwald took the opportunity of the departure of another long-lived and powerful Mercian overlord to re-establish for a short time an independent East Anglian kingdom. It may be recalled that the knowledge of this break in the otherwise apparently uninterrupted tenure of the Mercian kings in East Anglia rests solely on the existence of five coins. Another East Anglian attempt to take advantage of temporary Mercian weakness is recorded in the *Anglo-Saxon Chronicle* under 825 (corrected) when an unnamed king sought the help of Egbert of Wessex against the Mercians. He might, or might not, have been Athelstan but despite the fact that the East Anglians proceeded to kill the Mercian King Beornwulf, they could not exclude the Mercians as the latter's successor Ludica also struck coins in East Anglia. It was apparently only after the death of Ludica in 827 when the Mercians under Wiglaf became involved in a power struggle with the West Saxons under the powerful Egbert that Athelstan was able to secure his position and issue the rest of his prolific coinage. The evidence of a single coin cannot be conclusive but it is, perhaps, strong enough to prompt a historical reconsideration of whether the transmission of power in East Anglia from one Mercian early-ninth-century king to the next was quite as smooth as the silence in the documentary record and the sequence of coins known until the discovery of the ship penny might have suggested.

NOTES

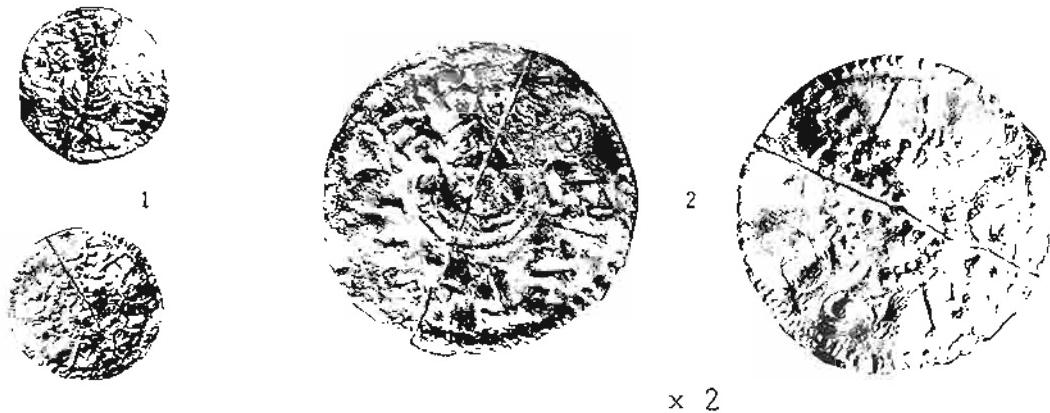
1. Pottery and other artifacts from the Roman to the later medieval periods have also been found on the site.
2. The fundamental paper on the coinage of this period for the kings of Mercia, Kent and Wessex is C.E.Blunt, C.S.S.Lyon and B.H.I.H.Stewart, 'The Coinage of Southern England, 796-840', *BNJ* 32 (1963), 1-74, and it has been extensively used in the preparation of this note. Coins are quoted by their numbers in this corpus. The authors do not deal,

except in passing, with the issues of the independent kings of East Anglia. The coinage of Athelstan I is discussed by H.E.Pagan in this volume.

3. Theoretically, the difference could instead be one of function or of place of issue. The former is very unlikely and in the absence of any evidence may be dismissed. The question of whether there was more than one mint in East Anglia is more open. Provenances of site-finds have suggested that the mint was at Ipswich but the St Edmund Memorial penny reading NORDVICO points to a mint at Norwich at the end of the ninth century and the possibility of there having been more than a single mint earlier or of it not always having been in the same place. The other issues by Eadgar for Athelstan are so similar to those of contemporary moneyers that he seems then to have been working at the same mint. Whether this was true in the more unstable earlier period when it will be proposed this coin was produced, it is impossible to say. The fact that the person who cut the dies for Eadgar at that time was less competent than some of those available to the Mercian kings in East Anglia does not necessarily prove that he worked at a different mint although it does leave that as a possible explanation.
4. K.F.Morrison and H.Grunthal, *Carolingian Coinage* (1967). Coins are quoted by their number in this corpus.
5. The Carolingian ship deniers were copied from Roman radiates of the usurper Allectus who succeeded Carausius as emperor in Britain, A.D.293-96.
6. There were six ship deniers among the forty-eight coins recorded from the Dorestadt hoard of 1845/6 (M&G No.18) about whose exact contents there is some doubt but which certainly included coins of the late, temple type; one was among the 428 coins from the Achlum hoard of 1852 (M&G No.29) which included coins of Louis's successor, Charles the Bald.
7. B.Malmer, *Nordiska Mynt före år 1000* (1966), especially p.247.
8. For a discussion of the status of this die see Blunt, Lyon and Stewart, p.27.
9. For the re-attribution of this coin to Ludica see Blunt, Lyon and Stewart, p.28.
10. Ciolheard was a moneyer of Offa, Coenwulf and Ceolwulf I but this spelling of the name and the general style favour an attribution to Coenwulf, see H.E.Pagan, 'A third gold coin of Mercia', *BNJ* 34 (1965), 8-10. For an illustration see G.C.Brooke, *English Coins*, revised edition (1950), pl.lxv,3.
11. Two crosses in the reverse legend is also noted on an obol of two-line/circumscription type of Louis the Pious from Quentovic (M&G 350).
12. The analyses for the coins of Coenwulf are taken from H.McKerrell and R.B.K.Stevenson, 'Some analyses of Anglo-Saxon and associated Oriental silver coinage', in *Methods of Chemical and Metallurgical Investigation of Ancient Coinage*, edited by E.T.Hall and D.M.Metcalf (1972), p.205, and that of the Athelstan penny of Brooke type 4, from analyses by E.J. Harris reprinted in the same work, 433, from *SCMB* 1961, 6. The Athelstan ship penny was analysed in the British Museum Research Laboratory under the direction of Dr Tite who adds the following comments: 'The coin has been extensively cleaned and when viewed under the microscope some areas of corrosion product which seem to have been

reduced to silver are visible. Traces of "inverted" scratches are also visible indicating that the die was not polished smooth before the design was cut (or else that it was roughly abraded after the design was cut). These scratches are not visible on the design. Analysis of the surface by X-ray fluorescence (without any further cleaning of the surface) indicated the composition quoted above. This composition is consistent with the Anglo-Saxon date ascribed to this coin'.

13. See D.M.Metcalf, 'Analyses of the metal contents of medieval coins', in Hall and Metcalf, pp.404-5 and D.M.Metcalf, J.M.Merrick and L.K. Hamblin, *Studies in the Composition of Early Medieval Coins* (1968), pp.38-39 and 56-57.



THE COINAGE OF THE EAST ANGLIAN KINGDOM
FROM 825 TO 870

H.E.Pagan

The history of East Anglia in the first three quarters of the ninth century is of considerable obscurity. The *Anglo-Saxon Chronicle* refers explicitly to East Anglia in entries for three years only (825, 841, 866) between the beginning of the century and the Viking conquest of the kingdom in 870. In each instance, as also with an entry for the year 827 which has East Anglian relevance, the *Chronicle* entry is only incidentally concerned with East Anglia and the East Angles and sheds no light on the internal history of the area. No East Anglian charters have survived for the period and no regnal list is extant for the ninth century. There exists a tenth-century hagiographical biography of King Eadmund, the East Anglian king who met his death at the hands of the Viking invaders of 870, but it has virtually nothing to contribute to East Anglian history except what may be an accurate record of Eadmund's age at death and of the length of his reign. Otherwise there are lists, not necessarily complete, of the bishops of the sees of Dunwich and Elmham down to 870, and some of these bishops are shown by their signatures on charters to have attended the Mercian court and meetings of the diocesans of Southern England in the earlier part of the century. Documentary sources have nothing else to offer on ninth-century East Anglia.

Numismatic evidence is more substantial. A series of coins associable with kings reigning in East Anglia between 825 and 870 was identified in its broad outlines by numismatic scholars more than a century ago; and recent research has added to these a further series of coins struck at an East Anglian mint or mints during the first quarter of the ninth century when East Anglia was under Mercian rule. The coinage has never been reviewed as a whole, but that of 800-25 is sufficiently covered by the relevant section in the classic study by C.E.Blunt, C.S.S.Lyon and B.H.I.H.Stewart,¹ and the present study will concentrate on the coinage after 825.

Issuers and moneyers

The names of the East Anglian rulers who issued coins in the period and their chronological succession are sufficiently established by coin evidence and hoard evidence which will be discussed shortly. Table 1 shows the integral nature of the coinage and the continuity which exists between its constituent parts.

The hoard evidence

East Anglian coins of the period have occurred in six or seven recorded coin hoards of which only four are, on the evidence at present available, of

TABLE 1

Issuers and Moneyers, c.823-870

<i>Mercian kings</i> c.823-c.827	<i>Aethelstan</i> c.827-c.841	<i>Aethelweard</i> c.848-c.855	<i>Eadmund</i> 855-870
Eacga			
Werbald			
Monna	Monn		
Eadgar	Eadgar		
Eadnoth	Eadnoth		
	Torhthelm		
	Rerhlem		
	Rernher/ Reghere	Raegenhere	
	Aethelhelm	Aethelhelm	Aethelhelm/ Ethelhelm
Tuduwine	Tuduwine	Dudda	Dudda
		Eadmund	Eadmund
		Twicga	Baeghlem
			Beornferth
			Beornhaeh
			Eadberht
			Eadwald
			Ethelulf
			Sigered

actual utility for the coinage's arrangement and dating. The sizeable Delgany hoard, deposited c.828, contained coins struck in East Anglia for Mercian rulers recognized there in the first half of the 820s but no coins in the name of the Mercian king Ludica who was the last Mercian ruler to have coins struck at an East Anglian mint, and no coins of any other ruler who might have ruled in East Anglia later than 825.² A smaller but important hoard, found near Great Yarmouth in the 1820s, is now known to have contained a coin of King Ecgberht of Wessex struck for him at the Canterbury mint some time after 830, and may therefore be presumed to have contained coins struck in East Anglia in the later 820s and early 830s;³ but it was not listed on discovery and it is a conjecture only that it contained East Anglian coins of this nature. The London (Middle Temple) hoard, deposited c.840, is important for the coinage of King Aethelstan and is discussed below. The Dorking hoard, deposited c.862, the Gravesend hoard, deposited c.871, and the Croydon hoard, deposited c.874, contained coins of each of the kings Aethelstan, Aethelweard and Eadmund and are useful for the arrangement of the coinage of the two latter rulers. Otherwise the Sevington hoard, deposited c.848, which contained two coins of Aethelstan, and the small Reading hoard, deposited c.870, which contained one coin of Eadmund, are the only hoards in which East Anglian ninth-century issues are known to have been represented, and their East Anglian element is of no consequence.

It may be noted here that single finds of East Anglian coins of the period 825-70 known to the present writer number just five: coins of Aethelstan found respectively at Hundon, Suffolk; Garboldisham, Norfolk; Bulwick, Northamptonshire; and near Rochester, Kent; and a coin of Aethelweard discovered in excavations at Ipswich.

The coinage of Aethelstan and the Middle Temple hoard

A substantial hoard of coins discovered in Hare Court, Temple, in 1893 passed virtually whole to the British Museum, through the good offices of Sir Augustus Franks, and its evidence is critical for the coinage of the period from the death of King Beornwulf of Mercia in 825 down to the early 840s. The contemporary publication of it by H.A. Grueber lists 240 English coins and one Carolingian denier; two further English coins are mentioned in footnotes.⁴ Of the 240 English coins actually listed sixty-six were struck in Kent, in London, or in East Anglia before c.825. The remaining 174 are later than 825 and comprise ninety-two coins of King Ecgberht of Wessex, twenty-eight coins of his son King Aethelwulf, four coins of King Wiglaf of Mercia, one coin of Archbishop Wulfred of Canterbury and ten coins of his successor Archbishop Ceolnoth, and thirty-nine coins in the name of Aethelstan, variously described as *Rex*, *Rex A* or (in a reverse inscription) *Rex Ang.* The hoard itself confirms the identification of this Aethelstan as a king of East Anglia by the appearance alongside his of coins of Beornwulf of Mercia by the moneyers Eadgar and Eadnoth, who recur as moneyers of Aethelstan and can firmly be identified as East Anglian by a chain of argument founded on moneyers' names and coin styles which goes back to coins struck at an East Anglian mint before 800.

As the Middle Temple hoard contained no coins of any other post-825 East Anglian ruler it is divinable that Aethelstan was both the first ruler of independent East Anglia after 825 and the ruler on the East Anglian throne when the hoard was deposited. These conclusions need a little amplification, for at neither point is the chronology quite straightforward. Although the Anglo-Saxon Chronicle records that Beornwulf of Mercia was killed by the East Anglians in 825, a statement carrying the implication that East Anglia was then in a state of revolt against Mercian rule, Beornwulf's successor Ludica had a few coins struck in his name at an East Anglian mint and it is likely that it was after Ludica's death in 827 rather than in 825 that Aethelstan's coinage commenced; the absence of any coins of Aethelstan in the Delgany hoard points this way and a date of c.827 for the beginning of his coinage has been used in Table 1 of the present paper.

It is also not absolutely clear when the hoard was deposited, for although Aethelwulf succeeded his father Ecgberht as king of the West Saxons and of Kent in 839 he had previously reigned in Kent as his father's deputy and it has been suggested by Mr C.S.S. Lyon that the coins in the hoard that carry Aethelwulf's name largely predate 839.⁵ If most do predate 839, a date of deposit c.840 is likely; if not, a date of deposit of c.842 as suggested by Grueber is more probable.

A detailed look at the coins of Aethelstan in the hoard is also instructive. To establish how representative the Aethelstan element in the hoard is of Aethelstan's coinage as a whole, the composition of the group of thirty-nine coins of Aethelstan needs to be compared with the composition of coins of Aethelstan known from all other sources, and this is done in Table 2. It should be explained that it has been necessary to list the coins in three categories: those from the Middle Temple hoard retained in the British Museum collection, numbering thirty-two; those from the Middle Temple hoard not retained by the British Museum, numbering seven; and all remaining coins of Aethelstan of which the writer has complete details. This is because four of the seven coins from the hoard not retained by the British Museum are not described in sufficient detail in Grueber's report for it to be absolutely certain that they do not appear twice in the table, once in the Middle Temple columns and once among the coins from other sources, and by placing the seven in a separate column the possibility of statistical confusion is at least alleviated.

TABLE 2

The Coinage of Aethelstan

<i>Moneyer</i>	<i>Type combination obverse/reverse</i>	<i>Number in BM from hoard</i>	<i>Number other from hoard</i>	<i>Number other known</i>
Aethelhelm	Cross-pellets/Cross	2	-	-
	Cross-pellets/Cross-pellets	1	-	-
	Cross-wedges/Cross-pellets	1	-	-
	Cross(wedges)/Cross(wedges)	1	1	-
	Cross/Cross-pellets	-	-	1
Eadgar	Cross-wedges/Cross-wedges	-	-	2
	Bust/Cross crosslet	-	-	1
	Bust/Moneyer's name	-	-	2
	Cross-wedges/Cross-pellets	1	-	2
	Cross-wedges/Cross-wedges	-	-	2
Eadnoth	Cross-pellets/Cross-wedges	1	-	-
	Bust/Cross crosslet	-	-	1
	Letter A/Cross-pellets	-	-	4
	Letter A/Cross-wedges	-	-	2
	Cross/Cross	-	2	-
Monn	Cross-pellets/Cross-pellets	1	-	-
	Bust/Star of rays	-	-	1
	Bust/Moneyer's name	-	-	1
	Letter A/Moneyer's name	3	1	5
	Letter A/Cross-pellets	1	-	3
Reg(en)here or Rernher	Cross-pellets/Cross	1	-	6
	Cross-pellets/Cross-pellets	3	-	4
	Cross-wedges/Cross	-	-	1
	Cross-wedges/Cross-wedges	-	-	1
	Pellet/Cross of pellets	1	-	-
Rerhelm	Letter A/Cross-wedges	-	-	1
	Letter A/Cross	-	-	1
	Letter A/Pellet	-	-	2
	Letter A/Pellet	1	2	-
	Letter A/Cross-pellets	1	1	9
Torhthelm	Letter A/Cross moline	1	-	2
	Letter A/Cross-wedges	1	-	1
	Letter A/Cross	-	-	1
	Cross-wedges/Cross-pellets	-	-	1
	Cross-wedges/Cross-wedges	-	-	1
Tuduwine	Cross-wedges/Cross	1	-	-
	Cross-pellets/Cross-wedges	1	-	-
	Cross/Cross	-	-	1
	Letter A/Letter Omega	7	-	8
	Cross-wedges/Cross-wedges	-	-	2
No name (king's name twice)	Letter A/Letter Omega	2	-	-
	Letter A/Cross	-	-	2

With such small numbers of coins involved the evidential value of this one hoard is necessarily limited. The evidence of the table does however suggest under-representation in the hoard of coins of the moneymen Eadgar, Eadnoth and Monn on the one hand and of coins of the moneymen Regenhore and Torhthelm on the other. As Eadgar, Eadnoth and Monn were all moneymen of the Mercian kings who ruled in East Anglia before Aethelstan assumed the throne, a ready explanation for the under-representation in the hoard of their coins is that much, if not all, of their production belonged to the early years of Aethelstan's reign and that it was no longer prominent in circulation at the time that the Middle Temple hoard was deposited. It is noticeable that the hoard did not contain any of the coins by these moneymen with the king's bust on the obverse, which stylistic and typological continuity with previous Mercian issues place at the very beginning of Aethelstan's reign; and it is also relevant that these moneymen did not coin for Aethelstan's successor, while the moneymen Aethelhelm and Tuduwine, better represented in the hoard, did. The fact of Regenhore's coining for Aethelstan's successor suggests that the explanation for the under-representation of his coins in the hoard is that they were not struck until near the end of Aethelstan's reign; but only five of them are known, of rather disparate appearance, and it is not wise to hang any argument on their evidence alone. That leaves for discussion the coins of the moneymen Torhthelm, not well represented in the hoard; the coins of the moneymen Aethelhelm and Tuduwine, adequately represented; the three coins (from a single pair of dies) of the moneymen Rerhlem (= ?Reghelm); and a relatively large number of coins, about a quarter of the coins of this king in the hoard, which have the inscription REX ANG or the king's name itself on the reverse in place of the name of a moneymen.

Most of the known coins of Torhthelm have the type combination obverse letter A, reverse cross with pellet in each angle. Of this type combination the Middle Temple hoard supplies two specimens only, while nine other specimens are known. Torhthelm coined neither for the Mercian kings who preceded Aethelstan nor for the East Anglian king who succeeded him, and there is thus no clue to the date in the reign at which he was active. If it could be argued that his production belonged late in the reign and that that was the reason for the paucity of his coins in the hoard, here would be ground for supposing that Aethelstan's coinage and Aethelstan's reign extended for a definite period after the deposit of the Middle Temple hoard. But the presence among the Middle Temple coins of a coin of Torhthelm of the type combination obverse letter A, reverse cross moline, with an obverse die without an inner circle entirely akin to obverse dies of his without inner circles found in combination with cross-and-pellets and cross-and-wedges reverses, is a limiting factor, as is also a certain similarity of treatment as regards obverse dies with the type letter A within inner circle between coins of Torhthelm and coins of Monn. On balance it is preferable to regard Torhthelm as a mid-reign moneymen.

There is no difficulty in regarding Aethelhelm and Tuduwine as late moneymen relative to the rest, since their coins have in common a slight coarseness of execution, a less accurate handling of lettering and spelling, and a more random pairing of obverse and reverse types than is normal for the coinage; moreover, both moneymen coined for the next East Anglian king in much the same vein as under Aethelstan. The coins of Rerhlem can be associated by style and type with those of Regenhore and likewise must be late; the presence in the hoard of three die-duplicates suggests that they were struck not long before the hoard's deposit.

The series of coins with REX ANG reverse inscriptions share the type

combination obverse letter A (Alpha), reverse letter Omega, with coins of Aethelstan of the moneyer Monn, but are distinguished from those by the king's name in the obverse inscription being rendered EDELSTAN (with a normal D) instead of EDELSTANI (with a triangular D), and by the absence from the obverse of REX ANG coins of pellets on either side of the central letter A that are habitually present on coins of Monn. The REX ANG coins bear fleeting resemblances to coins of the moneyer Torhthelm (one obverse die found with a REX ANG reverse is a die without an inner circle resembling obverse dies of Torhthelm), but nearly all Torhthelm's obverse dies again have the king's name rendered EDELSTANI. The use of a nominative form of the king's name on the REX ANG coins in preference to a genitive can be explained simply by syntax, Ethelstan in the nominative can be taken together with Rex Ang in the nominative, but the use on REX ANG coins of a normal D and on most coins of Torhthelm of a triangular D is not so explicable and suggests that the coins belong to separate periods in the reign. The number of REX ANG coins in the Middle Temple hoard suggests that the REX ANG coins were struck relatively close to the time of its deposit, and they may perhaps represent the product of the minting workshop with which Torhthelm had been associated after Torhthelm himself had ceased to coin.

The Dorking hoard

The Dorking hoard, discovered in April 1817, is numismatists' main source of information on the coinage of Aethelwulf of Wessex and on the first type of the coinage of Aethelwulf's son and successor, Aethelberht. It had an East Anglian content which on the basis of Taylor Combe's contemporary listing can be summarized as in Table 3. The summary may not provide an entirely accurate picture of the hoard's East Anglian element, for there were a fair number of coins from the hoard which Taylor Combe never saw; he put the figure for these at about forty, and the indications are that the actual figure was higher.⁶ It is also difficult to go beyond the summary into a consideration of the individual coins, as of the twenty-two coins of

TABLE 3

The East Anglian content of the Dorking Hoard

<i>King</i>	<i>Moneyer</i>	<i>Type combination (obv./rev.)</i>	<i>Number coins</i>
Aethelstan	Monn	Cross-and-pellets/cross-and-pellets	1
	Torhthelm	A/cross-and-pellets	1
	No moneyer	A/ (REX ANG legend)	1
			—
			3
Aethelweard	Aethelhelm	Cross-and-crescents/cross-and-pellets	2
		Cross-and-crescents/cross-and-wedges	3
	Dudda	A/cross-and-pellets	3
	Eadmund	A/cross-and-pellets	4
	Raegenhere	A/cross-and-pellets	1
	Twigca	Omega/cross-and-pellets	3
			16
Eadmund	Dudda	Cross-on-three-legs/cross-and-pellets	1
	Eadmund	A/cross-and-pellets	2
			3

East Anglian kings involved only two (Aethelweard *BMC* 24 and *BMC* 33) were selected by Taylor Combe for the British Museum collection and the remainder were dispersed.⁷ But Taylor Combe's publication of the hoard is specific as to kings, moneyers and type combinations represented, and the hoard sufficed to prove the correctness of a suggestion which Taylor Combe himself had previously made that coins traditionally attributed to an eighth-century king, Aethelheard of Wessex, should be attributed to an East Anglian king, Aethelweard of the mid ninth century. As he observed in his report on the hoard:

if the coins of Aethelweard...be compared with those of Eadmund, king of the East Angles, it will be found that not only the types of the two coinages agree, but that the names of several of the moneyers correspond; and even the formation of the letters, which are of a very peculiar shape, are precisely the same on the coins of both reigns.

The occurrence of coins with Aethelweard's name alongside coins of Eadmund in the Dorking hoard supplied the additional evidence which clinched the argument from the coins' types, inscriptions and styles.

If Aethelweard was an East Anglian king, when did he reign? The first consideration must be the date of this hoard's deposit. The Dorking hoard contained at least 105 coins of the last type of Aethelwulf of Wessex and at least 249 coins of his son, Aethelberht. As the coins of Aethelberht were all of one type and Aethelberht's other known substantive type was absent, the hoard must have been deposited measurably before the end of Aethelberht's reign. Aethelwulf died in 858 and Aethelberht in 866 and that might suggest a date of c.862 for the hoard's deposit; but the position is not quite that simple, for there is evidence that Aethelberht reigned in Kent as sub-king before his father's death and a consequent possibility that coins of his first type may have been struck from c.855 onwards. A date of deposit for the hoard of c.860, two years or so earlier than the c.862 date currently assigned it, would accord with the relatively poor representation in it of coins of Eadmund of East Anglia, whose date of accession is given as 855 by the biography of him mentioned earlier and who would therefore have been king and able to have coin struck in his name for six or seven years by c.862. At the same time there was no doubt some time lag before coins struck for circulation in East Anglia reached general circulation in southern England, and that is a factor that must be given its due weight.

Whether the hoard was deposited c.862 or a little earlier, its content is no way at variance with the documentary evidence that Eadmund became king of East Anglia in the mid 850s. The coinage of Aethelweard shows a progression into the coinage of Eadmund but no parallelism with it, there are no die-links between coins in their respective names, and a consideration of the names of Aethelweard's moneyers and of the types employed points plainly to Aethelweard's coinage filling the gap in the succession of East Anglian issues between those of Aethelstan and those of Eadmund and to its doing so without overlapping at either end. At the point where Aethelweard's coinage gives way to Eadmund's the similarity of the coinages is such that it can be said that they are the coinages of two successive kings. It cannot be said with the same certainty that Aethelweard succeeded Aethelstan, for although there is enough continuity from issues of Aethelstan to issues of Aethelweard to show that they are the work of the same moneyers or of the same minting organization in the same kingdom, the direct resemblance between the coins is less. If Aethelstan was still king c.840 and Aethelweard ceased to be king in 855, the most informed guess possible on the basis of the numismatic evidence would be that Aethelweard reigned c.848-c.855 and that Aethelstan's reign continued some time beyond c.840;

their reigns may have immediately succeeded each other and may have done so c.845 but at present that is conjecture only.

Taylor Combe records the presence in the hoard of coins of Eadmund of East Anglia by Aethelweard's moneyers Dudda and Eadmund, but not of coins of Eadmund by any other moneyers, even by the moneyers Aethelhelm and Twicga who had likewise worked for Aethelweard. Six of nine coins of Aethelhelm for Eadmund have provenances incompatible with their deriving from the Dorking hoard, but only five of fifteen coins of Twicga for Eadmund cannot be from Dorking and it would not be surprising if there were coins of this moneyer in the Dorking hoard which escaped Taylor Combe.

The Gravesend and Croydon hoards

The Gravesend hoard of 1838 was predominantly a hoard of coins struck in the six-year period 866-71 for Mercian and West Saxon rulers.⁹ It contained fifty-seven coins of Aethelred I of Wessex (king 866-71) and one coin of Aelfred (871-99), as against only three of Aethelwulf and none of Aethelbearht; it contained 434 coins of Burgred of Mercia (king 852-74 but coinage largely struck after c.865), as against one coin of an earlier Mercian king and none of Burgred's immediate predecessor, Berhtwulf; and it contained one coin of the last, post-866, type of Archbishop Ceolnoth of Canterbury, alongside two coins of his of earlier types. Its East Anglian content is given in Table 4. Since the hoard was deposited not earlier than 871 (it

TABLE 4

The East Anglian content of the Gravesend Hoard

King	Moneyer	Type combination (obv./rev.)	Number coins
Aethelstan	Monn	A/cross-and-pellets	1
		Cross-and-pellets/cross-and-pellets	1
			—
			2
Aethelweard	Aethelhelm	Cross-and-crescents/cross-and-wedges	1
		Cross-and-crescents/cross-and-pellets	1
	Eadmund	A/cross-and-pellets	1
	Tuduwine	A/cross-and-wedges	1
	Twicga	Omega/cross-and-pellets	1
			—
			5
Eadmund	Aethelhelm	Cross-and-crescents/cross-and-pellets	1
		Cross-and-crescents/cross-and-wedges	3
	(A)ethelwulf	Cross-and-crescents/cross-and-pellets	2
		Cross-and-crescents/cross-and-wedges	1
	Baeghelm	A/cross-and-pellets	5
	Beornferth	Cross of crosses/cross-and-pellets	9
	Beornhaeh	A/cross-and-pellets	2
	Eadberht	A/cross-and-pellets	1
	Eadmund	A/cross-and-pellets	5
	Eadwald	A/cross-and-pellets	9
	Sigered	A/cross-and-pellets	5
	Twicga	Omega/cross-and-pellets	7
			—

contains a coin of Aelfred of Wessex who became king in that year) it is not of any direct assistance for the internal chronology of the coinage of Eadmund of East Anglia, which must have ceased on Eadmund's death in 870. It is when its content is compared with that of the Dorking and Croydon hoards that some light on Eadmund's coinage emerges. Alongside coins in Eadmund's name by moneyers such as Aethelhelm, Beornferth, Eadmund and (A)ethelwulf, struck on broad flans and employing a range of types echoing those in use under Aethelweard, there is a series by the moneyers Baeghelm, Beornhaeh, Eadberht, and Sigere, on which the obverse type is always the letter A and the coins are struck on flans of reduced size. Coins of the first group mentioned have the obverse legend EADMUND REX AN and coins of the second group the legend EADMUND REX. One moneyer, Eadwald, has a production that cannot easily be fitted into this classification, and the groups are not quite exclusive, e.g. there are coins of moneyers of the first group with the obverse legend EADMUND REX only; but essentially they are different groups and must represent separate phases of Eadmund's coinage. The first group is evidently the earlier, as it has moneyer continuity with Aethelweard's reign as well as continuity of type and style. It follows that the second group is the later.

That conclusion is reinforced by the evidence of the Croydon hoard of 1862.⁹ This contained at least twenty-five coins of Aethelred I of Wessex and at least thirty-one coins of Aelfred, as well as many coins of Burgred of Mercia. Blunt and Dolley have dated its deposit to c.875, and although that date seems a little late, a date no earlier than c.873 seems certain. Apart from the coins mentioned, a single archiepiscopal coin of Canterbury, and stray Carolingian and Cufic coins, it contained twenty-four coins of rulers of East Anglia, of which two were of Aethelstan, four were of Aethelweard and eighteen were of Eadmund. The hoard's slightly later date of deposit than that of the Gravesend hoard has its effect on the representation of Eadmund's moneyers within it; the 'late' moneyer Sigere is (by one coin) the moneyer best represented, and coins of him, Baeghelm, Beornhaeh, and Eadberht represent eight out of a total of eighteen, whereas they represent only thirteen of fifty in Gravesend.

The organization of the coinage

It can be seen from the discussion of the hoard evidence that although there is an interruption in the evidence for the coinage after the deposit of the Middle Temple hoard and before the start of the coinage in the name of Aethelweard, there is an element of continuity that runs through the coinage from before c.825 right down to 870. The continuity is principally a continuity in moneyers' names but it extends to types and styles, and where the evidence for the coinage and its dating is clearest (at the very beginning of Aethelstan's reign; under Aethelweard and in the early years of Eadmund's reign; and late in Eadmund's reign), the coins appear to be the product of one minting organization. This minting organization seems customarily to have relied on one die-cutting workshop only at any one time, and to have involved no more than four or five moneyers working concurrently. There is no evidence to show at what town they worked or indeed to show that all worked at the same town; but in the Anglo-Saxon kingdoms farther south it was the practice in the ninth century to have mints only at such major centres as London, Canterbury and Rochester, and the probability is that in East Anglia the moneyers were established either at Ipswich or at Norwich, with the odds in Ipswich's favour because of the dearth of historical and archaeological evidence for Norwich before the beginning of the tenth century.

A few coins of Aethelstan, most significantly those of a moneyer Rernher or Reghere, are of idiosyncratic style which might suggest a different locale for their manufacture; but this moneyer of Aethelstan may be identified with the moneyer Raegenhere who worked for Aethelweard and issued coins that fit well with coins for Aethelweard by other moneyers. Their virtual absence from the Middle Temple hoard suggests that the Rernher or Reghere coins are among the last coins of Aethelstan, and if they belong late in his reign the peculiarity of their style may reflect a general decline in coin manufacturing standards also evident in coins for Aethelstan by Aethelhelm and Tuduwine, and not be a sign of their having been issued from a different mint.

Coins of Aethelstan, Aethelweard and Eadmund exhibit a range of combinations of type that can be set out as in Table 5. Little sense can be made of the various type combinations found on Aethelstan's coins, for it does not appear how the different types used by different moneyers relate to each other or relate chronologically, except at the very start of the coinage.

With Aethelweard the position is different, for if the four moneyers who continue into Eadmund's reign (and who therefore must have been working simultaneously late in Aethelweard's reign) are considered together, their production in terms of type can be set out thus:

Aethelhelm	Cross and crescent obvs./cross and pellet and cross and wedges revs.
Dudda	Letter A obvs./cross and pellets and cross and wedges revs.
Eadmund	Letter A obvs./cross and pellet revs.
Twicga	Letter omega obvs./cross and pellet revs.

Here, it would seem, are four moneyers working at the same time and using at least three clearly defined types. That the basic intention was that the production of each moneyer should be distinguished by type is made clearer by consideration of their production under Eadmund, which is:

Aethelhelm	Cross and crescent obvs./cross and pellet and cross and wedges revs.
Dudda	Cross on three legs obvs./cross and pellet revs.
Eadmund	Letter A obvs./cross and pellet revs.
Twicga	Letter Omega obvs./cross and pellet revs.

If under Aethelweard and at the beginning of Eadmund's reign the unity of the coinage is displayed by a conscious variation in type between the production of each moneyer, which necessarily implies some common organizational framework, at the end of Eadmund's reign its unity is as clearly demonstrated by uniformity of type. Of the coins with obverse legend EADMVND REX which form a late group in Eadmund's coinage, all are of the type combination letter A/cross and pellets except a single coin of the moneyer Beornferth.

Metallurgy and Weight

No analyses of the coinage's metallic content are as yet available, but it is necessary to record here one significant feature of its middle period. Coins of Aethelweard and those coins of Eadmund which were struck early in his reign are usually found in an excellent state of preservation. Edward Hawkins noted this in his publication of the Gravesend hoard, describing the coins of Aethelweard in it as being 'as fresh as if just struck', and this feature has been noted by other more recent writers. Hawkins himself sought to argue from this that Aethelweard 'was some

TABLE 5

*Combinations of Type
on the Coins of Aethelstan, Aethelweard, and Eadmund*

<i>Obv. type/rev. type</i>	<i>Moneyer</i>
<i>Aethelstan</i>	
Bust/cross crosslet	Eadgar, Eadnoth
Bust/name of moneyer across field	Eadgar, Monn
Bust/star of rays	Monn
Letter A/name of moneyer across field	Monn
Letter A/cross and pellets	Eadnoth, Monn, Torhthelm
Letter A/cross and wedges	Eadnoth, Reghere, Torhthelm
Letter A/cross	Iegenher, Torhthelm, uncertain
Letter A/cross moline	Torhthelm
Letter A/letter omega	No moneyer (REX ANG), double obverse
Letter A/pellet in circle	Rerhelm, Rernher
Cross/cross	Eadnoth, Tuduwine
Cross/cross and pellets	Aethelhelm
Cross and pellets/cross	Aethelhelm, Monn
Cross and pellets/cross and pellets	Eadnoth, Monn
Cross and pellets/cross and wedges	Eadgar, Tuduwine
Cross and wedges/cross	Monn, Tuduwine
Cross and wedges/cross and pellets	Aethelhelm, Eadgar, Tuduwine
Cross and wedges/cross and wedges	Eadgar, Ethilhelm, Monn, Tuduwine, double obverse
Cross of wedges/cross of pellets	Aethelhelm
Pellet in circle of pellets/ cross of pellets	Re(genhe?)re
<i>Aethelweard</i>	
Letter A/cross and pellets	Dudda, Eadmund, Regenhore
Letter A/cross and wedges	Dudda, Tuduwine
Cross and crescents/cross and pellets	Aethelhelm
Cross and crescents/cross and wedges	Aethelhelm
Cross and wedges/cross and crescents	Aethelhelm
Letter omega/cross and pellets	Twicga
<i>Eadmund</i>	
Letter A/cross and pellets	Baeghelm, Beornhaeh, Eadberht, Eadmund, Eadwald, Sigered
Letter A/cross and wedges	Sigered
Cross of three crosses/cross and pellets	Beornferth
Cross on three legs/cross and pellets	Dudda
Cross and crescents/cross and pellets	Aethelhelm, Aethelwulf
Cross and crescents/cross and wedges	Aethelhelm, Ethelwulf
Cross and pellets/cross and pellets	Baeghelm
Letter omega/cross and pellets	Twicga

unmentioned contemporary, perhaps coadjutor, of Edmund's, in his latter days', but it is clear that the reason for the coins' fresh appearance is not that they were struck late in Eadmund's reign and therefore near the time when the hoard was deposited, but that they were manufactured with unusual competence. Contemporary coins struck at Canterbury in the 850s for Kings Aethelwulf and Aethelbearht of Wessex and which have as their reverse type a moneyer's name arranged on the four limbs of a cross (the 'open cross' type) are characteristically brittle and are very frequently found chipped at the edges. As yet it is premature to suggest that the silver content of the East Anglian and Canterbury coinages differed, but it can at least be asserted that those responsible for the East Anglian coinage in the 850s were more successful metallurgists than their counterparts in Kent.

The histogram reproduced below (Fig.1) should be treated with caution, for the number of coins on which it is based is not very large, and the

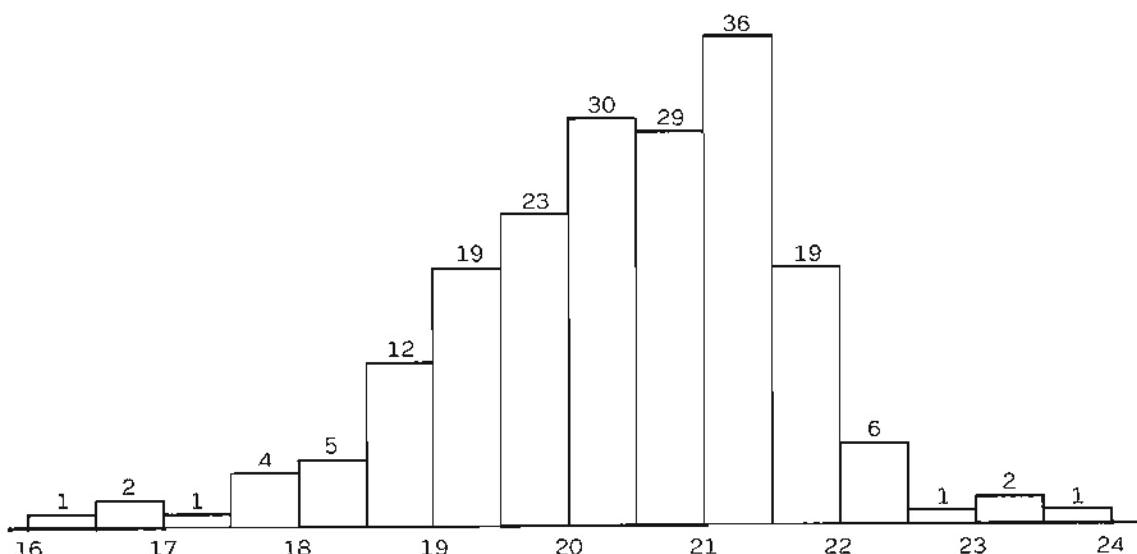


Fig. 1. Weight structure of the coinage

Numbers at the heads of columns are of whole coins, the weights of which fall within brackets of half a grain, commencing with 16.0-16.4 gr. and finishing with 23.5-23.9 gr.

coins from the Middle Temple hoard which dominate the material from Aethelstan's reign were cleaned on discovery and may have lost weight in the process. Nevertheless, the weights of most of the known coins fall within the bracket 18.5gr.-22.0gr., and the extreme upper limit of tolerance seems to have been just over 23.0gr.; a coin of Eadmund by the moneyer Eadwald (*SCBI Mack 676 ex Parsons (1954) 116*) which weighs 24.2gr. may be a cast. One may conjecture that the weight aimed at by the moneyers was one of around 21.0gr., with some permitted fluctuation upwards and downwards.

The reduction in flan size towards the end of Eadmund's reign may have been linked to a reduction in the coinage's weight, or even with a modest debasement; the number of weights recorded for later coins of Eadmund is insufficient to show whether their weight fell or not.

Number of Dies Employed to strike the Coinage

The corpus of East Anglian coins which concludes this paper gives the following totals of obverse dies, reverse dies, and surviving coins for each king:

Aethelstan	91 obverses	91 reverses	109 coins
Aethelweard	31 obverses	30 reverses	42 coins
Eadmund	91 obverses	102 reverses	126 coins

A detailed breakdown of the figures by reign and moneyer is appended. It is not possible to draw any particular conclusions for Aethelstan's reign, for the survival rate both of coins and of dies is low (the figures for the moneyer Torhthelm illustrate this vividly) but for Aethelweard and Eadmund

TABLE 6

The Number of Dies employed

Reign	Moneyer	Obverses	Reverses	Coins
Aethelstan	Aethelhelm	7	8	9
	Eadgar	7	6	9
	Eadnoth	8	8	10
	Monn	25	23	30
	Re(ge)nhere (or Rernher)	5	5	5
	Rerhelin	1	1	3
	Torhthelm	15	15	16
	Tuduwine	5	5	5
	No moneyer (REX ANG)	13	15	16
	No moneyer (king's name twice)	3	3	4
	No moneyer (uncertain)	2	2?	2
		91	91	109
		—	—	—
Aethelweard	Aethelhelm	8	9	12
	Dudda	5	5	10
	Eadmund	9	8	10
	Raegenhere	2	2	2
	Tuduwine	1	1	1
	Twicga	6	5	7
		31	30	42
		—	—	—
Eadmund	(A)ethelhelm	7	10	10
	Baeghelm	9	9	9
	Beornferth	13	14	21
	Beornhaeh	2	5	5
	Dudda	2	3	3
	Eadberht	2	2	2
	Eadmund	14	15	17
	Eadwald	13	14	20
	Ethelwulf	10	10	13
	Sigered	8	8	9
	Twicga	11	12	17
		91	102	126
		—	—	—
Total for all reigns		213	223	277
		—	—	—

the evidence is rather better. In both reigns the evidence suggests that one obverse die was issued with one reverse die, rather than with two reverse dies as in the later Anglo-Saxon period; this emerges from the figures for Twicga in both reigns, for Dudda in Aethelweard's reign and for Beornferth in Eadmund's reign.

List of the East Anglian Coinage

This list aims to include all coins of Kings Aethelstan, Aethelweard and Eadmund of which an illustration is available or which are in public or private collections accessible to the author. It also cites coins that have passed through major London sales but of which no illustration is available.

The coins are listed by reign, by moneyer within each reign, and by type combination within each moneyer's production. Within the type combination for the particular moneyer each combination of dies is assigned a Roman number and each coin struck from that pair of dies is assigned an Arabic number. Type combinations are printed in italics, with the obverse type preceding the reverse type.

Obverse and reverse inscriptions are given in full, with the obverse legend first. It has however been necessary to normalise all letter forms to their present-day equivalents, and in consequence, although the coin legends given convey the sense and spelling of the legends on the coins, they do not convey anything further and serious students must consult the coins themselves or the publications in which they are illustrated. Some attempt has been made to record the presence of pellet stops in the legends but here too it is advisable to make a further check.

It is convenient to record here that

- (i) the letter *thorn*, used on all coins of Aethelweard and on many coins of Aethelstan as the *th* element in the king's name, is throughout rendered by a capital D.
- (ii) the letter M is found on the coins both in a rounded form and in a straight form, and although no distinction is made in the lists between these two forms of the letter, the presence on coins of Aethelstan of the letter M in a rounded form is a reliable indicator that such coins belong early in his reign.
- (iii) an inverted letter L is used on coins of Eadmund by the moneyer Baeghelm to indicate the letter G of Baeghelm. I have thought it proper in this instance to render it by the letter G rather than by the letter L, for on these coins of Baeghelm the letter L of Baeghelm is rendered by a normal L and it was clearly the engraver's intention to distinguish the G from the L.
- (iv) Similarly, where inscriptions incorporate the letters H and N and the engraver has positioned the bar between the two upright strokes in a way so as to make it ambiguous which letter is intended, I have looked to the sense of the inscription and rendered the letter as H or as N accordingly rather than take the letter form at its literal meaning.

Where coins have nineteenth-century sale catalogue provenances I have appended the name of the buyer of the coin at sales where the buyer was a private collector rather than a dealer, for this often clarifies the coin's pedigree. I have also given the name of the buyer even if he was a dealer where the coin's appearance at a particular sale was its last, as the buyer's name may provide a clue to the coin's fate.¹⁰

In compiling the list my main debt has been to Mr C.E.Blunt who with his unvarying kindness made available to me his records of East Anglian coins of this series. I am indebted to a number of other friends and fellow numismatists and I must mention more particularly Mr G.P.Dyer, Librarian and Curator of the Royal Mint, and Dr Bernd Kluge, of the Staatliche Museen zu Berlin, for allowing me to record details of coins under their care which have not otherwise been published.

I must also record a degree of indebtedness to Daniel Henry Haigh's *An Essay on the Numismatic History of the Ancient Kingdom of the East Angles*, published as long ago as 1845, the plates of which illustrate forty-five coins from the period under review and are helpful in identifying coins known today with coins known in the 1840s. Haigh lists the collections from which his illustrations were drawn on p.viii of the preface to his book, and it is convenient to note here that although the collector J.D.Cuff is there credited with owning the coins illustrated on Plate I, nos. 5, 6, 12, 13; Plate II, nos. 6, 8, 9; and Plate III, nos. 9 and 10, the reference to Plate III is erroneous and the true reference is to Plate IV, nos. 9 and 10.

NOTES

1. C.E.Blunt, C.S.S.Lyon and B.H.I.H.Stewart, 'The coinage of Southern England, 796-840', *BNJ* 32 (1963), 1-74. East Anglian coins of the first quarter of the ninth century are discussed on pp.25-30.
2. H.E.Pagan and N.G.Rhodes, 'Anglo-Saxon coins in the Westminster School collection', *BNJ* 31 (1962), 11-26. The Delgany hoard is considered on pp.11-22 and its date of deposit on pp.14-15; the latest coins struck at the East Anglian mint were coins of Beornwulf of Mercia (823-25) by the moneyers Eadnoth and Monna.
3. H.E.Pagan, 'The "Suffolk" find of ninth-century Anglo-Saxon pence: a further note', *BNJ* 47 (1977), 128-30. See also Blunt, Lyon and Stewart, pp.43-45.
4. H.A.Grueber, 'A find of Anglo-Saxon coins', *NC* 3rd ser.14 (1894), 29-76. For the find spot of the hoard, not revealed at the time, see now *CH* 4 (1978), entry no.342 on p.104.
5. In his Presidential Address to the British Numismatic Society in 1968, *BNJ* 37 (1968), 216-38, especially 219-25. The case for supposing that the coins in question mostly predate 839 is not quite as strong as is there suggested, for of the coins by the Rochester moneyers Beagmund and Dun in Aethelwulf's name which seemed to Lyon disproportionately numerous, those by Dun are from one pair of dies only and Beagmund's coins include both die-duplicates and die-linked specimens. A paragraph in Grueber's paper cited which suggests that the incidence of die-duplication and die-linkage within the hoard was small is distinctly misleading.
6. T.Combe, 'An account of some Anglo-Saxon pennies found at Dorking in Surrey', *Archaeologia*, 19 (1821), 109-19. A group of coins evidently from the hoard and not listed by Combe appeared as lots 44-58 in a sale at Sotheby's as early as 11-12 April 1820; the coins were sold anonymously, but contemporary annotated copies of the catalogue record the vendor as 'Engleheart, Doctors' Commons', i.e. Nathaniel Brown Engleheart, a proctor in Doctors' Commons, and research will no doubt

show that he had some connection with Dorking. See C.E.Blunt, 'A small parcel from the Dorking (1817) hoard', *BNJ* 41 (1972), 179, for another group of coins which escaped Combe.

7. Many of the coins which Combe did not select appear in the catalogue of the collection of 'an eminent collector', sold at Sotheby's 21-23 March 1831; the collection was sold by Charles Barclay, of Bury Hill, Surrey, and numismatists have identified him as the 'eminent collector', but in fact the collection had been made by Charles Barclay's father, Robert (1751-1830), and was dispersed following Robert's death. Robert Barclay had purchased 553 coins from the Dorking hoard shortly after its discovery (Combe, p.119).
8. E.Hawkins, 'On some Saxon coins discovered near Gravesend in 1838', *NC* 3 (1841), 14-34. It is convenient to record here the existence of an engraving of six coins from the hoard which shortly after Hawkins's publication of it were in the possession of the local Gravesend collector William Crafter and are presumably additional to those listed by Hawkins; the coins are of Burgred of Mercia (*BMC* type A, moneyer Guthere, and type D, moneyer Cenred), Aethelred I of Wessex (usual lunette type, moneyer Dudd), Aethelweard of East Anglia (cross and crescents/cross and crescents, moneyer Aethelhelm, same dies and possibly same coin as *SCBI* Mack 675), and Eadmund of East Anglia (cross of three crosses/cross and pellets, moneyer Beornferth, same dies and possibly same coin as *SCBI* Cambridge 452, and cross and crescents/cross and wedges, moneyer Ethelwulf, cf. *BMC* 71, 72). The engraving is captioned 'discovered in Decr.1838, near Perry Street, Gravesend, with 552 others, described in the 3rd vol. of the Numismatic Chronicle p.14'; the only copy of it known to the writer is loose inside a volume of accounts preserved with the Royal Numismatic Society's archives, and it came to his notice too late to use it in connection with the corpus of East Anglian coins given later in this paper.
9. C.E.Blunt and R.H.M.Dolley, 'The hoard evidence for the coins of Alfred', *BNJ* 29 (1958-59), 220-47, especially 222-34.
10. The English portion of the Wigan collection, dispersed by private treaty in the 1870s following the death of Edward Wigan (1823-71), a famous collector of Roman coins, was not formed by him but by his uncle, John Alfred Wigan, a wealthy hop merchant in Kent who was already actively collecting coins in the 1830s. The elder Wigan's numismatic library surfaced quite unexpectedly in a country book sale in Somerset in the 1970s, but the writer understood at the time from Mr D.R.D.Edmunds, who attended the sale and purchased the bulk of the books, that these contained no annotations or other matter bearing on the provenances of Wigan's coins.

LIST OF THE COINS

AETHELSTAN

Coins struck c.827 - c.840 or later

Moneyer Aethelhelm (Ethilhelm)

Cross and pellets/cross

- | | | | |
|-----|---------------------------------|---------|-----------------------------|
| I. | +EADEL.STAN RE | | AEDELHELM MO |
| 1. | BMA 237 ex Middle Temple hoard. | 15.2gr. | (slightly chipped at edge). |
| II. | Same obverse die | | AEDELHE.L:M MO |
| 1. | BMA 236 ex Middle Temple hoard. | 19.3gr. | |

Cross and pellets/cross and pellets

- | | | | |
|----|---------------------------------|---------|---------------------|
| I. | +EADELSTAN RE | | EDEALHE:LM MO: |
| 1. | BMA 238 ex Middle Temple hoard. | 14.8gr. | (slightly chipped). |

Cross and wedges/cross and pellets

- | | | | |
|----|---------------------------------|---------|-----------------|
| I. | [+]AEDELSTAN DE | | AED[]ELM M:O:N |
| 1. | BMA 239 ex Middle Temple hoard. | 20.3gr. | (chipped). |

Cross of wedges/cross of wedges

- | | | | |
|----|---|---------|-------------|
| I. | +AEDELSAN RE | | AEDELHEM MO |
| 1. | BMA 240 ex Middle Temple hoard. | 18.8gr. | [Pl.1,1] |
| 2. | SCBI East Anglia 1070 (Norwich Castle Museum) bt Baldwin 1955, presumably specimen in their stock 1951 ex W.C.Wells, probably ex Middle Temple hoard. | 18.5gr. | |

Cross/cross and pellets

- | | | | |
|----|---------------------------|---------|----------------|
| I. | +AEDELSAN RE | | AEDEL.HEL.M.MO |
| 1. | BM ex T.G.Barnett (1935). | 14.6gr. | (chipped). |

Cross and wedges/cross and wedges

- | | | | |
|---|---|---------|------------------------|
| I. | +AEDELSTAN RE | | EDILHELM MON |
| 1. | SCBI Oxford 59, in Bodleian Library collection by 1894. | 18.6gr. | |
| II. | +AEDILSTAN RE | | EDIL.HE.L.M MON |
| 1. | Bergne (1873) 90 bt Pearson ex Cuff (1854) 344 bt Bergne. | Ill. | as Cuff Haigh Pl.II,9. |
| A coin of this type, obverse legend +AEDILSTAN REX (sic), reverse legend +EDILHELM MON, appeared in the Allen sale (1898) 191 bt Spink, presumably ex Croydon hoard. Grantley (1944) 907 (not ill) ex Sir John Evans, was of this type and had similar legends. | | | |

Moneyer Eadgar

Bust left/cross crosslet

- | | | | |
|----|--|--|--------------|
| I. | +EDELTTAN RG | | +E.ADGAR MON |
| 1. | <i>BMC</i> 4 ex S.Tyssen (1802). Ill. Ruding Pl.17,5 and Haigh Pl.I,3. 20.3gr. (chipped on edge). [Pl.1,2] | | |

Bust right/moneyer's name in four lines

- | | | | |
|-----|--|--|-----------------------|
| I. | +EDEL.STAN REX | | EA./DGAR/MONE/.T.A |
| 1. | <i>BMA</i> 230 ex Sir John Evans ex Montagu (1895) 341 ex Marsham (1888) 97 ex J.A.Wigan ex Dymock (1858) 73 bt Wigan. 19.8gr. (chipped). [Pl.1,3] | | |
| II. | +EDELSTAN REX | | +EA./DG.AR/MONE/.T.A. |
| 1. | <i>SCBI Norweb</i> 106 ex Lockett (1956) 2671 (ill) ex Bascom (1914) 25 ex Rashleigh (1909) 110 ex Cuff (1854) 349 bt Rashleigh ex W.B.Rich (MS note in grangerised Ruding plates in possession Messrs Spink 1975). Ill. as Cuff Haigh Pl.I,5 and Ruding Pl.C,3. 20.0gr. | | |

Cross and wedges/cross and pellets

- | | | | |
|-----|---|--|------------------|
| I. | +EDELSTAN RE | | +EADGAR MONE |
| 1. | <i>BMA</i> 231 ex Sir John Evans ex Allen (1898) 192 (ill) ex Croydon hoard. 21.1gr. [Pl.1,4] | | |
| 2. | J.A.Wigan (in 1845). Ill. Haigh Pl.II,11. | | |
| II. | +EDELSTAN RE | | same reverse die |
| 1. | <i>BMA</i> 232 ex Middle Temple hoard. 19.7gr. | | |

Cross and wedges/cross and wedges

- | | | | |
|----|---|--|--------------|
| I. | +EDELSTAN RE | | +EADGAR MONE |
| 1. | <i>BMC</i> 6 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). Ill. Ruding Pl.9,10 and Haigh Pl.II,10. 19.8gr. | | |
| 2. | Ryan (1952) 650 (ill) ex Grantley (1944) 906. Slightly cracked. The existence of a Tyssen specimen of this variety was noted by Ruding. | | |

Cross and pellets/cross and wedges

- | | | | |
|----|--|--|--------------|
| I. | +EDELSTAN RE | | +EADGAR MONE |
| 1. | <i>BMA</i> 233 ex Middle Temple hoard. 17.5gr. | | |

Moneyer Eadnoth

Bust right/cross crosslet

- | | | | |
|----|---|--|---------------|
| I. | +EDELSTAN REX | | +EADNOD MONET |
| 1. | <i>BMA</i> 234 ex Sir John Evans ex Dymock (1858) 72 bt Wigan ex Joseph Barratt, presumably ex Dimsdale (1824) 613. Ill. as Dymock Haigh Pl.I,4. 21.5gr. [Pl.1,5] | | |

Letter A/cross and pellets

- | | | | |
|----|--|--|--------------------------------------|
| I. | +EDEL.STAN | | +EADNOD MO (no inner circle on obv.) |
| 1. | <i>SCBI Glasgow</i> 415 ex Dr William Hunter (d.1783). Ill. Ruding Pl.9,3. 18.6gr. | | |

- II. +EDELSTANI | +EADNOD MO
1. P.W.Carlyon-Britton (1916) 902 (ill) bt Spink. 19.8gr.
 2. SCBI American Collections 229 (American Numismatic Society) ex Lockett (1955) 410 ex 'Astronomer' (F.McClean) (1906) 106 (this provenance noted in Lockett's copy of 'Astronomer' catalogue) ex Montagu (1895) 343 ex J.A.Wigan. 21.4gr. (chipped).
- A coin with the same obverse reading as these two coins but with the A of EADNOD upside down is ill. Fountaine Pl.II,22.

- III. +INATSLEDE | +E.ADNOD MO
1. BMC 9 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). Ill. Ruding Pl.9,5 and Haigh Pl.I,14. 20.7gr. (slight crack). [Pl.1,6]

Letter A/cross and wedges

- I. +EDELSTANI | +EADNOD MON
1. BMC 8 ex S.Tyssen (1802) ex Rev.R.Southgate (1795). Ill. Ruding Pl.9,6 and Haigh Pl.II,2. 20.7gr.
- II. +EDELSTANI | +EADNOD MON
1. Specimen seen Messrs Baldwin 1976 (in Mr A.H.F.Baldwin's private collection 1958). Chipped.
There was a fragmentary coin of this moneyer and type combination in the Walters sale (1932) lot 42; and Brumell (1850) 9 bt Cureton ex Duke of Devonshire (1844) 38, 'slightly chipped but very fine and rare', seems also to have been of this description.

Cross/cross

- I. +EDELSTANI | +EADNOD MON
1. BMC 7 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). Ill. Ruding Pl.9,8 and Haigh Pl.II,3. 21.5gr.
 2. C.E.Blunt ex Duke of Argyll ex Sir John Evans, probably ex Middle Temple hoard. Chipped.
There was another specimen of this moneyer and type in the Middle Temple hoard but it cannot be traced.

Cross and pellets/cross and pellets

- I. +EDELSTAN RE A | +EDNOD MRHA
1. BMA 235 ex Middle Temple hoard. 19.2gr. [Pl.1,7]

Moneyer Monn

Bust right/star of rays

- I. +EDELSTAN REX | +MONN MON.ETA
1. BM ex Lockett (1955) 409 (ill) ex Rashleigh (1909) (ill) 109 ex Cuff (1854) 348. Ill. as Cuff Haigh Pl.I,6 and Ruding Pl.C,2. 21.9gr. [Pl.1,8]

Bust right/moneyer's name in three lines

- I. +EDELSTAN REX | +MON/MONE/TA (many pellets in legend and field)
1. BMC 5 ex Rev W.Cotterell (1877). 18.8gr. [Pl.1,9]

Letter A/moneyer's name in three lines

- | | | | |
|------|--|------|---|
| I. | +ED.ELSTANI | | MOM/+MOME/TA (many pellets in legend and field) |
| 1. | BMC 13 ex Duke of Devonshire (1844) 41. | III. | Haigh Pl.I,7. 20.8gr. |
| 2. | BM ex Lockett (1955) 411 (ill) ex NCirc July-Aug 1917, no.54176. | | 17.5gr. |
| 3. | Ryan (1952) 651 (ill) ex Grantley (1944) 905 ex L.A.Lawrence. | | |
| II. | +E:D:E:L-ST.A.N:Y: | | MON/+MONE/TA (many pellets in legend and field) |
| 1. | BMA 241 ex Middle Temple hoard. 19.3gr. [Pl.1,10] | | |
| 2. | C.E.Blunt ex Baldwin 1951 ex W.C.Wells. | | |
| III. | +EDE.LSTAN:Y | | MON/MONE/TA (many pellets in legend and field) |
| 1. | BMA 242 ex Middle Temple hoard. 21.8gr. | | |
| IV. | +EDEL.S.T.A.N:I | | MON/+MOME/TA (many pellets in legend and field) |
| 1. | BMA 243 ex Middle Temple hoard. Broken and mended. | | |
| V. | Same obverse die | | same reverse die as BMA 242 above. |
| 1. | Seen Messrs Baldwin 1976 ex Grantley (1944) 910 bt by him from Spink 1900. | | |

Letter A/cross and pellets

- | | | | |
|------|--|-----------------------------|----------------|
| I. | +EDELSTANI | | +MONN MONETA |
| 1. | Bird (1974) 58 (ill). | 21.1gr. (slight edge crack) | |
| II. | +EDELSTANI | | +MONN MONETA |
| 1. | BMC 12 ex Gravesend hoard. III. Haigh Pl.II,1. 20.3gr. [Pl.1,11] | | |
| III. | +EDEL.STANI | | +MONN MONET.A. |
| 1. | SCBI Norweb 108 ex Ryan (1952) 652 (ill). | 21.1gr. | |
| IV. | +EDELSTANI | | +MON MONE:T. |
| 1. | BMA 244 ex Middle Temple hoard. 21.5gr. | | |

Cross and pellets/cross

- | | | | |
|------|---|--|-------------|
| I. | AEDILSTAN R | | MON MONET |
| 1. | BMA 249 ex Sir John Evans, on Evans's ticket saying 'Montagu 1896' but apparently not in Montagu sale. 19.0gr. (slightly chipped). | | |
| II. | A:EDIL-ST.A.N R. | | MON MON:ET |
| 1. | BMA 250 ex Middle Temple hoard. 19.0gr. | | |
| III. | AEDILSTAN R | | MON IHONET |
| 1. | SCBI Cambridge 448 ex A.W.Young ex P.W.Carlyon-Britton (1913) 307 ex Nunn (1896) 59 ex Montagu (1895) 347 bt Nunn ex Marsham (1888) 96. 20.7gr. | | |
| IV. | AEDILSTAN R | | MON MO.N:ET |
| 1. | Seen Messrs Baldwin 1976 ex Thorburn (1918) 32 ex Montagu (1895) 348 ex W.Brice ex Bergne (1873) 89 ex Cuff (1854) 342 bt Bergne. Ill. as Cuff Haigh Pl.II,6. | | |

2. Royal Mint, provenance not recorded. 20.2gr.

Loscombe (1855) 1043 had similar legends and was purchased by Brice, and it is possible that its history may have got confused with that of the coin originating with Cuff. Murchison (1866) 122 had the same legends and reverse stops as the Cuff coin; and Boyne (1896) 1128 was of this type, although the Boyne catalogue renders its obverse legend as AEDILSTAN RA.

V. +EADELSTAN | +MON MONET

1. BMA 248 purchased Messrs Rollin 1912 ex Sotheby sale 19-21 Dec 1911 lot 183, probably ex Dymock (1858) 75 ex Loscombe (1855) 1044 bt Dymock ex Sevington hoard. Ill. Haigh Pl. II, 5 as Loscombe. 19.8gr. [Pl. 1, 12]

A coin with similar readings but with a stop between the N and E of MONET is listed *NCirc* Nov-Dec 1919 no. 76228 and described there as having been found 'at an old malting at Garboldisham, Norfolk'.

VI. AD+ELSAN RE | +MON MONET

1. Royal Coin Cabinet, The Hague.

A coin apparently of this type combination and with the legends EADEL-STAN and MONN MONETA appeared in the Doulton sale (1888) lot 10, but it is the writer's opinion that this was actually a coin of the type combination cross and pellets/cross and pellets and that it should be equated with the coin now in Berlin ex Murdoch listed below.

Cross and pellets/cross and pellets

I. AIEDELSTAN RE | +MON MONET

1. BMC 10 ex Dorking hoard. 18.8gr.

II. AIEDELSTAN RE | same reverse die

1. BMA 245 ex Middle Temple hoard. 20.0gr.

III. Same obverse die | +MON MONET

1. BMA 246 ex Middle Temple hoard. 18.5gr. (edge chipped).
2. SCBI Glasgow 416 ex T. Coats ex J.A. Wigan, and very probably ex Cuff (1854) 345 bt Wigan. 21.0gr.

IV. AEDILSTAN D | MON MONET

1. BMC 11 ex S. Tyssen (1802). Ill. Ruding Pl. 9, 9. 20.6gr.

Dimsdale (1824) 215 was of this type and described by this Ruding reference, but it may well not have been from these dies.

V. +EADELSTAN | +MON MONET

1. BMA 247 ex Middle Temple hoard. 19.4gr.

VI. Same obverse die | +MONN MONETA

1. Staatliche Museen zu Berlin ex Murdoch (1903) 46a. 19.1gr.

Cross and wedges/cross

I. AEDELSTA RE | +MON MONET

1. SCBI Copenhagen 95 ex L.E. Bruun ex Montagu (1895) 349 bt Bruun ex Shepherd (1885) 34, described in the Shepherd catalogue as 'found near Rochester'; this was before 1874, for the Rev E.J. Shepherd who formed the collection died in that year. 19.7gr.

Cross and wedges/cross and wedges

- I. AEDILSTAN R | MON MONSET (crude style)
1. SCBI Cambridge 449 ex T.J.G.Duncanson ex F.G.Smart ex Rashleigh (1909) 111 ex Cuff (1854) 343. 21.Ogr.

Moneyer Regenhere or Rernher

Pellet within dotted circle/cross of pellets

- I.]LYTAN.[| RE[]ERE. (no inner circle on rev.)
1. BMA 257 ex Middle Temple hoard. Fragment. The reverse reading, and attribution to this moneyer, is not certain, for a large part of the coin is missing, but it seems most likely that the reading was RE[GENH]ERE or similar. [Pl.1,13]

Letter A/cross and wedges

- I. +EDELSTAN RE | REG'HERE MI (no inner circles)
1. BM acquired from Mrs Wright 1949, found at Hundon, Suffolk. 19.0gr. (chipped). [Pl.1,14]

Letter A/cross

- I. +EDELYHTR. | +IEGEHRER M (no inner circle on obv.)
1. BMC 35 ex W.J.Webster (dealer) 1869. 20.7gr.

Letter A/pellet

- I. +EDELSTNI | +RERNHER (no inner circle on obv.)
1. BMC 14 ex S.Tyssen (1802). Ill. Ruding Pl.9,1 and Haigh Pl.1,9. Probably the coin of this type in James West's collection in 1744 (impression in MS catalogue of West's coins at Royal Mint). 20.8gr.

There was a similar coin in the Dimsdale sale (1824) lot 214.

- II. +EDELSTNI | +ERHNPER (no inner circle on obv.)
1. BMC 15 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). 21.5gr. [Pl.1,15]

Moneyer Rerhelm

Letter A/pellet

- I. +EDELYTN R | +RERHELM (no inner circle on obv.)
1. BMA 251 ex Middle Temple hoard. 20.2gr. [Pl.1,16]
2. SCBI Oxford 58 ex Lockett (1960) 3602 ex Middle Temple hoard. 18.2gr. (chipped on edge).
3. C.E.Blunt ex Lockett (1955) 412 ex Sir John Evans ex Middle Temple hoard. Weight given Lockett cat 21½gr.

Moneyer Torhthelm

Letter A/cross and pellets

- I. +EDELSTANI | +ORHTHELM (no inner circle on obv.)

- I. *BMC* 18 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). III.
Ruding Pl.9,2. 21.2gr. [Pl.1,17]
- II. +EDE:L.S.T.A.NI | +TORHTELMI (no inner circle on obv.)
1. *BMC* 17 ex Bank of England (1877) ex Robert Austen (d.1797). Probably the coin of this type in James West's collection in 1744 (impression in MS catalogue of West's coins at Royal Mint). 22.2gr.
- III. +EDE:L.S.T.A.NI | +TORHTELMI (no inner circle on obv.)
1. BMA 252 ex Middle Temple hoard. 18.5gr. (chipped).
- IV. +EDELTSANI | +TORHTELMI (no inner circle on obv.)
1. BM ex T.G.Barnett (1935) ex Montagu (1895) 342 (ill) ex Maynard (1885) 17. 19.7gr.
- Coins with the same type combination and with the same misspelled obverse legend occurred in the Murchison sale (1866) lot 121 and the Loscombe sale (1855) lot 1041, and it may be that the BM coin should be equated with either or both of these.
- V. +EDELSTANI (three wedges in legend) | +TORHTELMI (no inner circle on obv.)
1. *NCirc* July-Aug 1955 no.17305 ex Duke of Argyll ex Grantley (1944) 909 (ill), no doubt ex Sotheby 6-7 April 1899 lot 198 ex Nunn (1896) 61 ex Marsham (1888) 94 ex J.A.Wigan ex Cuff (1854) 340 bt Wigan, and the coin ill. as Cuff Haigh Pl.I,12.
- VI. +EDELSTANI | +TORHTELMI
1. *BMC* 16 ex S.Tyssen (1802). III. Ruding Pl.9,4. 18.7gr.
- VII. +EDELSTANI | +TORHTELMI
1. BM ex T.G.Barnett (1935) ex Reynolds (1914) 16 (ill) ex O'Hagan (1907) 308 (ill). 19.5gr.
- VIII. +EDELSTAN:I: | +TORHTELMI
1. *SCBI Mack* 674 ex Parsons (1954) 115 (ill). 19.4gr.
2. Bergne (1873) 87 bt Williamson, ex Dymock (1858) 76 bt Bergne, which was ex Cuff (noted as such in Dymock MS now in possession Mr C.E. Blunt), and therefore either Cuff (1854) 338 or Cuff (1854) 339. III. as Cuff Haigh Pl.I,13.
- IX. +EDEL.STANI (two wedges after T) | +TORTHELMI (no inner circle on obv.)
1. Dr J.Lavertine ex Raynes ex P.W.Carlyon-Britton (1917) 1624 (ill) bt Brushfield ex Lord Middleton (1910) 17, and therefore possibly from the collection formed by Lord Middleton's ancestor Francis Willoughby (d.1672).

Letter A/cross moline

- I. +EDE.LSTA.NI | +TORHTELMI (no inner circle on obv.)
1. *SCBI Copenhagen* 93 ex L.E.Bruun ex Montagu (1895) 344 bt Bruun ex Pownall (1887) 30, found at Bulwick, Northants c.1864. 20.7gr.
- II. +EDELSTANI | +TORHTHE.L.M (no inner circle on obv.)
1. BMA 254 ex Middle Temple hoard. 18.5gr. [Pl.1,18]

III. +EDELSTANI | +TORHTHELM (no inner circle on obv.)

1. Bonham 4 December 1980 lot 705 (ill).

Letter A/cross and wedges

I. +EDELSTANI | +TORHTHELM (no inner circle on obv.)

1. BMA 253 ex Middle Temple hoard. 20.6gr.

II. +EDELSTANI | +TORHTHELM (no inner circle on obv.)

1. Brown ('now Brown' noted in Dymock MS) ex Dymock (privately). Ill. as Dymock Haigh Pl.I,11.

A coin in the Duke of Devonshire sale (1844) lot 37, bt Dymock, may perhaps have been the coin listed above.

Letter A/cross

I. +EDELSTAN: I | +TORHTHELM

1. SCBI *American Collections* 230 (American Numismatic Society) bt from Seaby 1959, ex Drabble (1939) 358 (ill). 20.3gr.

Moneyer Tu du wine

Cross and wedges/cross and pellets

I. +EDE.L:STAN.R.E | TVDVPINE M.O

1. Lockett (1958) 2672 (ill) ex Bliss (1916) 54 (ill) ex Montagu (1895) 350 ex Shepherd (1885) 33 ex Cuff (1854) 346. Weight given Lockett cat as 20½gr.

Cross and wedges/cross and wedges

I. +AE.DEL.STAN RE | TVDVPINE M.O

1. BM ex T.G.Barnett (1935), ultimately ex Cuff (1854) 347 bt Dymock. Ill. as Cuff Haigh Pl.II,8. The intervening history of the coin is not documented, but it seems likely that it was the coin listed NCirc Sept-Oct. 1921 no.96440 ex C.M.Crompton-Roberts, and it may also have been the coin in the Murchison sale (1866) lot 123. 20.5gr. [Pl.1,19]

Cross and wedges/cross

I. A.EDELSTAN RE | TVDVPINE MO

1. BMA 256 ex Middle Temple hoard. 17.5gr. (chipped). Nunn (1896) 60 is described as a coin of these types and with legends AEDELSTAN R and TVDVPINE MO.

Cross and pellets/cross and wedges

I. +EADEL.STAN RE | TVDVPINE MO

1. BMA 255 ex Middle Temple hoard. 18.5gr.

Cross/cross

I. AEDEL.STAN RE | TVDVPINE MO

1. Clontebrook Trust (1974) 17 (ill) ex Lockett (1960) 3604 ex Napier (1916) 19 ex Reynolds (1914) 15 ex Rashleigh (1909) 112 ex Loscombe (1855) 1042 bt Rashleigh ex Sevington hoard. Ill. as Loscombe Haigh Pl.II,4. 20.3gr.

No moneyer. REX ANG reverses.

Letter A/Letter Omega

- | | | | |
|----|---|--|-----------|
| I. | +E.DEGSTA.N
(N rendered by inverted V and I) | | +REX.A.NG |
|----|---|--|-----------|
1. Glendining 13 March 1974 lot 68 (ill) ex C.Anthony ex Drabble (1939) 357 (ill). Weight given Drabble cat. 18½gr.
- | | | | |
|-----|------------------|--|--|
| II. | Same obverse die | | +REX A.NG (N rendered by inverted V and I) |
|-----|------------------|--|--|
1. SCBI Norweb 107. 19.7gr.
- | | | | |
|------|--------------|--|---|
| III. | +EDE.G.STA.N | | +REX ANG (N rendered by inverted V and I) |
|------|--------------|--|---|
1. SCBI Copenhagen 94 ex L.E.Bruun ex 'Astronomer' (F.McClean) (1906) 105 (ill) ex Montagu (1895) 346 (ill) ex Marsham (1888) 95. 21.0gr.
- | | | | |
|-----|-----------|--|---|
| IV. | +EDEGSTAN | | +REX. A.NG (N rendered by inverted V and I) |
|-----|-----------|--|---|
1. SCBI American Collections 228 (H.S.Bareford = Bareford (1981) 442) ex Lockett (1960) 3603 (ill) ex Bliss (1916) 53 (ill) ex Montagu (1895) 345 ex W.Brice ex Bergne (1873) 88, and presumably ex Cuff (1854) 341 bt Bergne. 21.8gr.
- | | | | |
|----|---|--|---------------------------|
| V. | +EDELSTANI (N ren-
dered by inverted V
and I, separated by
a pellet) | | +R.EX ANG (wedge after A) |
|----|---|--|---------------------------|
1. BMC 19 ex Duke of Devonshire (1844) 39. III. Haigh Pl.I,8. 21.0gr.
- | | | | |
|-----|-----------|--|--|
| VI. | +EDEGSTAN | | +REX.A.NG (N rendered by inverted V and I) |
|-----|-----------|--|--|
1. BMA 258 ex Middle Temple hoard. 19.5gr.
2. BMC 20 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). III. Ruding Pl.9,7. 21.0gr.
- | | | | |
|------|-----------|--|-----------------------------|
| VII. | +EDELSTAN | | +REX.ANG (wedges in legend) |
|------|-----------|--|-----------------------------|
1. BMA 259 ex Middle Temple hoard. 21.5gr.
- | | | | |
|-------|------------|--|-----------|
| VIII. | +EDELSTA.N | | +REX A.NG |
|-------|------------|--|-----------|
1. BMA 260 ex Middle Temple hoard. 18.5gr.
- | | | | |
|-----|---------|--|---------|
| IX. |]LSTAN[| |]REX.A[|
|-----|---------|--|---------|
1. BMA 261 ex Middle Temple hoard. Fragment.
- | | | | |
|----|-----------|--|--------------------------------------|
| X. | +EDEGSTAN | | +REX A.NG (N rendered by inverted V) |
|----|-----------|--|--------------------------------------|
1. BMA 263 ex Sir John Evans. 18.3gr. (slightly chipped). [Pl.1,20]
- | | | | |
|-----|-----------|--|-----------------------------|
| XI. | +EDELSTAN | | +REX ANG (wedges in legend) |
|-----|-----------|--|-----------------------------|
1. BMA 262 ex Middle Temple hoard. 19.4gr.
- | | | | |
|------|------------------|--|---|
| XII. | Same obverse die | | +REX ANG (N rendered by inverted V and I) |
|------|------------------|--|---|
1. C.S.S.Lyon ex Ryan (1952) 653 (ill), said in Ryan catalogue to be ex Carlyon-Britton, and therefore presumably Mann (1917) 144 bt Gantz ex P.W.Carlyon-Britton (1913) 308 bt Mann. 18.4gr. (chipped).
- | | | | |
|-------|-----------|--|----------------------------------|
| XIII. | +EDELSTAN | | +R.E.X...A•NG (no inner circles) |
|-------|-----------|--|----------------------------------|
1. BMA 265 ex Middle Temple hoard. 20.3gr. [Pl.1,21]

XIV. +E.DEL.STAN | +REX.AN.G (wedges in legend)

1. BM E4252. 20.3gr. (slight edge chip).

XV. +E.DEGSTAN | +R..EX.A.NG
(N rendered by
inverted V and I)

1. BMA 264 ex Middle Temple hoard. 20.0gr. [Pl.1,22]

The following coins were also of this type combination: Nunn (1896) 62, with edge slightly broken; Murchison (1866) 120 ex Dymock (1858) 74 ex Duke of Devonshire(1844) 40, with obverse reading EDEGSTAN; and Boyne (1896) 1127, with obverse reading EDEGSTAN also, probably ex Christmas (1864) 36 bt Boyne, although the obverse legend is given in Christmas cat. as ETHELSTANI (sic).

No moneyer. King's name on both sides of coin.

Cross and wedges/cross and wedges

I. +EDELSTAN RE | +EDELSTAN RE
(wedge after E
of RE)

1. BM ex Lockett (1955) 413 ex Grantley (1944) 908, bt by Grantley from Spink 1900 and therefore Sotheby 6-7 Apr. 1899 lot 197 ex Bateman Heirlooms (1893) 268 bt Napier ex Lewin Sheppard (1861) 81 bt Bateman. Ill. as Sheppard Haigh Pl.II,12. 20.0gr. [Pl.1,23]

A specimen of this variety is cited Ruding, I, 121, note 5, as being in G.H.Barker's collection; it may well be identical with Lewin Sheppard's coin, for Lewin Sheppard died in the early 1820s and the collection was not substantially added to between then and 1861.

II. +EDELSTCN REX | +EDELSTANIA

1. SCBI West Country Museums 347 (Salisbury Museum) ex Dr H.P.Blackmore (before 1929). 17.2gr.

No moneyer. King's name on both sides.

Letter A/letter Omega

I. +EDEGSTAN | +EDELSTAN REX (legend inverted and letters oddly formed)

1. BMA 266 ex Middle Temple hoard. 19.9gr. [Pl.1,24]
2. BMA 267 ex Middle Temple hoard. 21.2gr.

King's name on obverse. Reverse reading uncertain.

Letter A/cross

I. +EDELSTA.NI | +DAMOAIRAE

1. Bascom (1914) 26 ex Briggs (1893) 180. Fractured and repaired.
Weight given Bascom cat. as 18 $\frac{3}{4}$ gr.
A similar coin was offered to Messrs Baldwin in 1973.

II. +ED.EL.STA.N.I | +DMDDAIRAE

1. Joseph Kenyon coll. Ill. as Kenyon Haigh Pl.I,10; cf. NC 7, (1844-45), 39. This may have been the same specimen as that which passed

through the Briggs and Bascom sales, but the number of pellets in the obverse legend differs from what the Bascom catalogue indicates.

Uncertain moneyer and type combination

A coin in the Loscombe sale (1855) lot 1045 is described there as having obverse type a cross and obverse inscription AEDELSTAN RE, but the reverse type is not specified and the moneyer's name is described as 'indistinct'.

AETHELWEARD

Coins struck c.848 or earlier - 855

Moneyer Aethelhelm

Cross and crescents/cross and pellets

- | | | | |
|------|---|---------|---|
| I. | EDELPARD REX
(wedge after L) | | AEDELHELM |
| 1. | BMC 21 ex S.Tyssen (1802) ex Rev.R.Southgate (1795). | III. | Ruding Pl.3,1. 20.4gr. |
| II. | EDEL.PARD REX | | AEDEL.HEL.M |
| 1. | BMC 22 ex Gravesend hoard. | III. | Haigh Pl.III,2. 21.4gr. [Pl.2,1] |
| III. | EDELPARD REX | | AEDELHELMV |
| 1. | BM ex T.G.Barnett (1935) ex Thorburn (1918) 33 bt Barnett ex Allen (1898) 194 (ill) ex Croydon hoard. | 19.6gr. | |
| 2. | SCBI Cambridge 450 ex T.J.G.Duncanson ex F.G.Smart. | 20.3gr. | |
| IV. | EDELPARD REX | | AEDEL.HEL.M |
| 1. | SCBI Glasgow 417 ex Dr W.Hunter (d.1783) ex James West (in his collection 1744). | 20.5gr. | Perhaps the coin ill. Fountaine Pl.II,3, with the same types and legends, and the same pellets in the reverse legend. |
| V. | EDELPARD REX | | AEDELHELM |
| 1. | BMA 268 ex Sir John Evans ex Croydon hoard. | III. | Anderson no.1. 21.2gr. |
- Murchison (1866) 109 ex Dymock (1858) 79 ex Barclay (1831) 132, no doubt from Dorking hoard, was of this type and had a pellet after the P of EDELPARD in the obverse legend. Cuff (1854) 261 bt Bergne, ex Dimsdale (1824) 79 bt Cuff, seems to have been of this type, but if it was it is not traceable in the Bergne sale of 1873.

Cross and crescents/cross and wedges

- | | | | |
|-----|---|---------|------------|
| I. | EDELPARD REX | | AEDELHELM |
| 1. | BMC 24 ex Dorking hoard. | 21.3gr. | |
| 2. | Lockett (1958) 2673 (ill) ex Rashleigh (1909) 113 (ill) ex Lewin Shepard (1861) 78. Weight given Lockett cat. | 18½gr. | |
| II. | EDELPARD REX | | AEDELHELMV |
| 1. | SCBI Copenhagen 96 ex L.E.Bruun ex Montagu (1895) 353 bt Bruun ex W.Brice ex Bergne (1873) 78. | 21.3gr. | |

2. *BMC* 23 ex Gravesend hoard. 21.5gr.

A coin in the Rebello collection, ill. Ruding Pl.26,1, had the same types, legends and pellets in legends, but apparently had an unbarred A in the king's name.

III. Same obverse die | .A:E.DELHELM

1. *SCBI Mack* 675 ex Drabble (1939) 359 (ill) ex Mann (1917) 145 ex Napier (1916) 20 ex P.W.Carlyon-Britton (1913) 309. 21.1gr.

A coin in the Brumell sale (1850) lot 6, and another in the Allen sale (1898) 193, ex Croydon hoard, were of these types and of this general character.

Cross and wedges/cross and crescents

I. EDELPARD REX | AEDELHELM

1. *BMA* 269 ex Montagu (1895) 354 (ill) ex Marsham (1888) 88 ex Murchison (1866) 111. 19.9gr. [Pl.2,2]

Moneyer Dudda

Letter A/cross and pellets

I. +EDEL.P:ARD REX | +DVDDA MONE

1. *SCBI Glasgow* 419 ex T.Coats ex J.A.Wigan. 20.5gr.

2. *BMC* 26 ex S.Tyssen (1802). Ill. Ruding Pl.3,5. 20.3gr. [Pl.2,3]

3. Ryan (1952) 654 (ill) ex Rashleigh (1909) 114 ex W.Brice duplicates (1853) 1. Weight given Rashleigh cat. as 20½gr. Edge damaged.

4. C.E.Blunt ex Sir John Evans ex Montagu (1895) 352 ex W.Brice ex Bergne (1873) 79 ex Dymock (1858) 78 bt Bergne ex Joseph Barratt.

II. +EDELP.ARD REX | +DVDDA MONE

1. *BMC* 25 ex S.Tyssen (1802) ex Rev.R.Southgate (1795). Ill. Ruding Pl.26,3. 17.8gr.

2. C.E.Blunt, bt from Baldwin 1951 presumably ex Lawrence (1951) 212. Fragment.

III. +EDEL.PA.RD RE | DV.D.D.A M.O:N.E.

1. *BMC* 27 ex Bank of England (1877) ex R.Austen (d.1797). 20.9gr.

2. Specimen seen Messrs Baldwin 1981. 16.2gr.

Coins in the Rich sale (1828) lot 7, and the Barclay sale, (1831) 133, no doubt ex Dorking hoard, were apparently of this moneyer and type combination.

Letter A/cross and wedges

I. ED[EL].PARD REX | DVD[D]A MONE

1. *SCBI Glasgow* 418 ex Dr W.Hunter (d.1783). 18.1gr. (damaged).

Grantley (1944) 912 ex Boyne (1896) 1125, presumably ex Christmas (1864) 164 bt Boyne ex Croydon hoard, appears to have been similar; the Grantley catalogue records, not necessarily accurately, the presence of two pellets between the second and the third D of DVDDA.

II. EDELPARD REX | DVDDA MONE

1. Hon.R.Assheton coll.

Moneyer Eadmund

Letter A/cross and pellets

- I. AEDELVVEARD.REX | +EADMVN^D MO^W (runic 0)
1. BMC 28 ex S.Tysson (1802). Ill. as Tyssen Ruding Pl.3,3 (but described as ex Cotton by Dolley & Strudwick). 19.3gr. (chipped on edge).
- II. AEDELVVEARD.REX | +EADMVN^D MO (runic 0)
1. BMC 29 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). Ill. Ruding Pl.26,2 and Haigh Pl.3,4. 20.9gr. (slight edge chip). [Pl.2,4]
 2. Shepherd (1885) 31 (see Shepherd catalogue).
- III. AEDELVVEARD REX | +EADMVN^D MO^W (runic 0)
1. BMC 30 ex Gravesend hoard. 20.4gr.
- IV. AEDELVVEARD REX | same reverse die (later state)
1. SCBI American Collections 231 (American Numismatic Society) ex Lockett (1955) 414 (ill) ex Reynolds (1914) 17 ex 'Astronomer' (F.McClean) (1906) 107 (ill) ex Montagu (1895) 351 ex Maynard (1885) 17. 21.2gr.
- V. AEDELVVEARD REX | +EADMVN^D MO^W (runic 0)
1. SCBI Copenhagen 97 ex L.E.Bruun ex Gentleman (1903) 338. 20.0gr.
- VI. AEDELVVEA.RD.REX | +EADMVN^D MO (runic 0)
1. SCBI Oxford 60 ex NCirc July-Aug. 1955 no.17306 ex Drabble (1943) 825 (ill) ex P.W.Carlyon-Britton (1916) 903. (The Mann provenance claimed for this coin in SCBI Oxford is incorrect). 19.7gr.
- VII. +AEDELVVEAED REX | +EADMVN^D MO^W (runic 0)
1. SCBI Copenhagen 98 ex L.E.Bruun ex Ready (1920) 41, presumably ex 'Astronomer' (F.McClean) (1906) 108 bt Ready and ex Marsham (1888) 90. Broken and repaired. 19.1gr.
- VIII. AEDELVVEA.RD REX | +EADMVN^D MO (runic 0)
1. SCBI American Collections 232 (J.L.Dresser) ex Grantley (1944) 911 (ill). 19.8gr.
- IX. AEDELVVE []REX | +EADMVN[]O (runic 0)
1. SCBI Yorkshire Museums 964 (Leeds University) ex Winchester Cathedral Library ex Eyre (1764). 17.5gr. (chipped).
The following were also of this type combination and moneyer: Cuff (1854) 262; Montagu (1886) 11 ex Wigan, perhaps ex Duke of Devonshire (1844) 7 bt Wigan; Murchison (1866) 110; Sotheby 6-7 April 1899 bt Spink ex Bateman Heirlooms (1893) 267 bt Napier ex Lewin Sheppard (1861) 77 bt Bateman. The MS catalogue of James West's collection in the Royal Mint contains an impression of the reverse only of a coin of this character, reading +EADMVN^D MO. (runic 0); and Fountaine Pl.II,2, illustrates a similar reverse.

Moneyer Raegenhere

Letter A/cross and pellets

- I. +AEDELVVEARD RD | RAEXENHEBE.M (wedge after M)
1. BMC 34, acquired before 1812. Ill. Ruding Pl.3,4. 20.1gr.

II. +AEDELVVEABD REX | RAEXENHEBE M.

1. BM ex T.G.Barnett (1935). 20.3gr. [Pl.2,5]

There is a coin of this type and moneyer in the Hermitage Museum, Lenigrad, ex Reichel; no illustration is available but it is described in the Reichel catalogue (1843), no.64, as having the legends +[]DELVVEARD RE and RA[]ENHERE M. It may be the fragmentary coin of this moneyer which was lot 134 in the Barclay sale (1831). Fountaine Pl.II,1 illustrates a coin of these types and legends.

Moneyer Tuduwine

Letter A/cross and wedges

I. +AEDELVVEARD RE | +TVDVPL.NE M

1. BMC 31 ex Gravesend hoard. 21.7gr. [Pl.2,6]

Moneyer Twicga

Letter Omega surmounted by cross/cross and pellets

I. +EDELVVEARD REX | +T.P:I:C:CVA MON

1. BMC 32 ex Gravesend hoard. 21.3gr. [Pl.2,7]

II. +EDELVVEARD REX | +TPICC.A MON.

1. BMC 33 ex Dorking hoard. 20.2gr.

III. +EDELVVEARD REX | +TPICC.A MON

1. Ryan (1952) 655 (ill) ex P.W.Carlyon-Britton (1917) 1625 (ill) ex Rashleigh (1909) 115 ex Dymock (1848) 53 ex Duke of Devonshire (1844) 8 bt Dymock. Ill. as Dymock Haigh Pl.III,9. 19.3gr.

IV. +EDELVVEARD REX | +TPIC:C:A MON. (wedge below first group pellets)

1. SCBI Norweb 109 ex Lockett (1955) 415 ex Bascom (1914) 27 ex Richardson (1895) 21 ex Marsham (1888) 89. 20.5gr.

V. +EDELVVEARD R.E.X | same reverse die as I

1. Hon.R.Assheton, probably ex Duke of Devonshire (1844) 9.

There was a coin of this moneyer and type combination in the Cuff sale (1854), lot 263; the reverse legend given in the Cuff catalogue is TRIC.C.A MON (sic).

Cross crosslet/cross and pellets

I. XEDELOARD RE | +TVIGA MONET

1. SCBI East Anglian Museums 1071 (Ipswich Museum), found in excavations at Ipswich 1957/8. 19.2gr.

2. Staatliche Museen zu Berlin ex Murchison (1866) 112 ex Dymock (1858) 77 ex William Bayfield coll. Ill. as Bayfield Haigh Pl.III,1.

EADMUND

Coins struck 855 - 870

Moneyer Aethelhelm

Cross and crescents/cross and pellets

- I. EADMUND REX AN | +EDELHELM MO
 1. BMC 70 ex Gravesend hoard. Ill. Haigh Pl.IV,1. 22.5gr.
- II. Same obverse die | +EDELHELM MO
 1. SCBI East Anglian Museums 1076 (Norwich Castle Museum) bt from Seaby 1953. 17.9gr. (chipped).
- III. +ADMUND REX AN +EDELHELM MO
 1. SCBI Glasgow 420 ex Dr.W.Hunter (d.1783). Ill. Ruding Pl.9,6. 19.4gr.
- IV. +EADMUND REX AN | +EDELHELM MO
 1. National Museum of Wales ex Lockett (1955) 416 (ill) ex Grantley (1944) 919 ex L.A.Lawrence.

Cross and crescents/cross and wedges

- I. EADMUND RE AN | AEDELHEL·M·
 1. BMC 37 ex Gravesend hoard. Ill. Haigh Pl.IV,2. 21.5gr. [Pl.2,8]
- II. Same obverse die | AEDEL.HEL.M.
 1. BMC 38 ex Gravesend hoard. 23.2gr.
- III. NA ER DNVM DAE | AEDEL.HEL.M.
 1. BMC 39 ex S.Tyssen (1802). Ill. Ruding Pl.27. 21.2gr.
- IV. Same obverse die | AEDELHELM
 1. BMC 40 ex Gravesend hoard. 20.3gr.
- V. NA ER DNVM DAE AEDEL.HEL.M
 1. Royal Mint, no provenance. 19.5gr.
- VI. +ADMUND REX AN | +EDELHELM MO
 1. Ryan (1952) 656 (ill) ex Rashleigh (1909) 117 ex White (1848) 52. Weight given Rashleigh cat. 17½gr.
 A coin with similar legends to the Ryan coin is ill. Fountaine Pl.V,20. Coins of this type combination and moneyer and with retrograde obverse legends occurred in the Robert Boyne sale (1843) lot 96 bt Brumell, and the Murchison sale (1866) lot 116.

Moneyer Baeghelm

Letter A/cross and pellets

- I. +ADMUND REX- | +BAEGHELM MO· (AE ligate)
 1. BMC 42 ex Duke of Devonshire (1844) 35. 19.8gr. (broken and mended).

- II. +EADMVND REX | +BAEGHELM MO
 1. *BMC* 41 ex Gravesend hoard. 21.0gr. [Pl.2,9]

Cross and pellets/cross and pellets

- I. AEADMVND REX | +BAEGHEL.M M:
 (AE ligate)
1. *BMC* 43, acquired before 1838. Ill. Haigh Pl.IV,3. Perhaps the coin ill. Ruding Pl.9,5, as from the Bootle collection, which has the same reverse reading but an obverse legend given as +.EADMVND. 18.2gr. [Pl.2,10]
- II. +EADMVND REX | +BAEGHELM M.
 1. *BMC* 44 ex Gravesend hoard. 21.5gr.
- III. +EADMVND REX | +BAEGHELM MO
 1. *BMC* 45 ex Gravesend hoard. 21.4gr.
- IV. +EADMVND REX | +BAEGHELM MO
 1. BM ex T.G.Barnett (1935). 19.2gr.
- V. +EADM[VN]D REX | +DA[EG]HELM MO.
 1. Dr J.Lavertine ex Grantley (1944) 914 ex L.A.Lawrence ex W.Allen (not in sale) ex Croydon hoard. Ill. Anderson no.7. Large chip in edge.
- VI. +EADMVND REX | +BAEGHELM IO
 1. SCBI East Anglian Museums 1072 (Bury St Edmunds Museum) ex Frost (1976) ex Ryan (1952) 657 (ill). 20.6gr.
- VII. +EADMVND REX | +BAEGHELM MO
 1. NCirc Sept. 1977, no.8244 (ill) (in Spink stock by 1972).
 There were similar coins in the P.W.Carlyon-Britton sale (1916), lot 906, legends given as +EADMVND REX and +BAEGHELM M or MO, and in the Henry Clark sale (1898), lot 10, reverse legend given as AEGHELM (sic). Note also Cuff sale (1854), lot 333, and Boyne sale (1896), lot 1126, types not clearly indicated.

Moneyer Beornferth

Cross of three crosses/cross and pellets

- I. +EADMVND REX.AN | BEORNFEERD MO
 1. *BMC* 46 ex S.Tyssen (1802). 21.7gr.
 2. Grantley (1944) 915 (ill) ex Allen (1898) 196.
- II. +EADMVND REX AN | BEORNFERD MO
 1. *BMC* 47 ex Gravesend hoard. 19.7gr.
 2. SCBI Oxford 61 ex Lockett (1960) 3605 ex Sir John Evans ex Croydon hoard. 16.9gr.
 3. SCBI Copenhagen 102 ex L.E.Bruun. 20.5gr.
- III. +EADMVND REX A.N. | BEORNFERD MO
 1. SCBI Glasgow 422 ex T.Coats (d.1883). 20.3gr.
 2. SCBI Cambridge 451 ex A.W.Young ex 'Gentleman relinquishing pursuit' (Sir H.Weber) (Sotheby 16 June 1885) 6 ex Lake Price (1880) 18. 21.0gr.

- IV. +EADMVND REX AN | Same reverse die
1. SCBI Copenhagen 101 ex L.E.Bruun ex Hazlitt (1909) 123. 22.3gr.
- V. +EADMVN.D.R.EX AN | BEORNFE:RD MO
1. BMC 48 ex Gravesend hoard. 21.0gr. [Pl.2,11]
- VI. +EADMVND REX AN | BEORNFERD MO
1. SCBI Norweb 111 ex V.Brand ex Ready (1920) 42 (ill) ex 'Astronomer' (F.McClean) (1906) 110 bt Ready ex Bateman Heirlooms (1893) 266 ex Cuff (1854) 330. 21.0gr.
- VII. +EADMVND.RX A.N | BEORNFERD MO
1. BMC 49 ex Gravesend hoard. 21.2gr.
 2. SCBI Mack 678 ex Ryan (1952) 658 (ill) ex Ready. 19.0gr.
- VIII. +EADMVND RX AN | BEORNEE.RD MO
1. BM ex T.G.Barnett (1935) ex P.W.Carlyon-Britton (1916) 904 (ill) ex Montagu (1895) 361 ex W.Brice ex Bergne (1873) 85. 21.6gr.
- IX. +EADMVND REX AN | BEORNFERD MO
1. SCBI American Collections 236 (J.L.Dresser) ex NCirc Dec. 1953 no.AS1 ex Duke of Argyll ex Drabble (1943) 826 (ill) ex Ready. 19.1gr.
- X. Same obverse die | BEORNFERD MO
1. Marquess of Bute (1951) 55 (ill).
- XI. Same obverse die | BEORN.FERD MO
1. Hon.R.Assheton, apparently ex 'Dean of St Patrick' (H.R.Dawson).
- XII. +EADMVND REX AN | BEORNF:RND MO
1. Seen Messrs Baldwin 1976 (in A.H.F.Baldwin's private collection in 1958), ex Ready (1920) 45.
- XIII. +EADMVND REX AN | BEORNFERD MO
1. Hermitage Museum, Leningrad.
- XIV. +EADMVND REX A.N | BEORNF.E:RD MO
1. NCirc Sept.1969, no.6302 (ill) (= NCirc Apr.1970, no.4359 (ill)). There are numerous other records of specimens of this type combination and moneyer: Grantley (1944) 916 ex Sotheby 6-7 Apr.1899 lot 200 bt Webb ex Briggs (1893) 181 bt Napier (it apparently had pellets after N, D, and X on its obverse, and a group of pellets after E on the reverse); Ready (1920) 44 bt Gantz ex Marsham (1888) 91, with legends +EADMVND RX AN and BEORNEERD MO; Crowther (1904) 7 bt Ready ex Shepherd (1885) 32 bt Crowther, with reverse BEORNFERD MO; Bascom (1914) 29; Montagu (1895) 360 bt Crowther, with legends EADMVND REX AN and BEORNFERD MO; Nunn (1896) 65 bt Spink ex Montagu (1888) 16, with reverse BEORNFEERD MO; Bergne (1873) 84 and Bergne (1873) 85, one of which was no doubt Cuff (1854) 332 bt Bergne; Murchison (1866) 115, with reverse BEORNFEERD MO; Christmas (1864) 40; Dymock (1858) 81 ex Brumell (1850) 7; Cuff (1854) 331; Dymock (1848) 54; Durrant (1847) 37, bt Cureton for J.A.Wigan, apparently ex Tyssen duplicates sale (1802) 86.

Same types, but variety with obverse legend +EADMVND REX only

I. +EADMVND REX | BEORNFERD MO :

1. C.S.S.Lyon ex NCirc Dec.1953 no.AS2 ex Duke of Argyll ex Drabble (1939) 360 (ill) ex Rashleigh (1909) 118 (ill) ex Philip Rashleigh (d.1811). 19.5gr.
2. SCBI Cambridge 452 ex A.W.Young ex P.W.Carlyon-Britton (1912) 311. Ill. Haigh Pl.IV,12, where it is identified as being in the British Museum. 21.8gr.

There was a specimen of the same variety in the Reynolds sale (1914) lot 20, but the catalogue records its weight as 19½gr. and it may well have been the Rashleigh specimen cited above.

Moneyer Beornhaeh

Letter A/cross and pellets

I. +EADMVND REX | +BEORNHAEH.

1. NCirc Dec.1953 no.AS4 ex Duke of Argyll ex Drabble (1939) 361 (ill) ex Montague (1895) 357 (ill) ex W.Brice ex Bergne (1873) 81. Weight given Drabble cat. as 18gr.

II. Same obverse die | +BEORNHAEH.

1. BMC 51 ex Gravesend hoard. 20.0gr. [Pl.2,12]

III. Same obverse die | +BEORNHAEH.

1. Corpus Christi Coll. Cambridge ex Rev. S.S.Lewis ex Croydon hoard. Ill. BNJ 30 (1960-61), Pl.xxiii, no.5. 20.0gr.

IV. Same obverse die | +BEORNHAEH.

1. B.H.I.H.Stewart, bt from Baldwin 1963.

V. +EADMVND REX | +BEORNHAEH M.

1. BMC 50 ex Gravesend hoard. 21.0gr.

There were coins of this type combination and moneyer in the Murchison sale (1866) lot 119; Christmas sale (1864) lot 37; and Lewin Sheppard sale (1861) lot 80.

Moneyer Dudda

Cross on three legs/cross and pellets

I. +EADMVND REX AN | +DVDD.A MO.N.E

1. SCBI Glasgow 423 ex Dr W.Hunter (d.1783). Ill. Ruding Pl.9,8. 20.8gr.

II. Same obverse die | +DVDD.A MONE

1. BMC 52 ex S.Tyssen (1802) ex Rev.R.Southgate (1795). Ill. Haigh Pl.IV,11. 21.3gr. [Pl.2,13]

III. +EADMVN[D RE]X AN | +D[VD]D.A M.N.E

1. C.E.Blunt ex Grantley (1944) 917. Fragment.

There was a coin of this moneyer in the Barclay sale (1831) lot 136, possibly from the Dorking hoard.

Moneyer Eadberht

Letter A/cross and pellets

- I. +EADMVND REX | EA.D.BER.HT MO:
 1. *BMC* 53 ex Gravesend hoard. 20.8gr.
- II. +EADMVND REX | +EADBERHT MO
 1. *BMA* 270 ex Sir John Evans ex Croydon hoard. III. Anderson no.2. 18.4gr. [Pl.2,14]
 P.W.Carlyon-Britton (1918) 1628, bt Baldwin, had these types and the legends +EADMVND REX and .EADBERHT MO, and is described as 'slightly chipped'. It may perhaps have been Bascom (1914) 28, weight given as 15 $\frac{3}{4}$ gr.

Moneyer Eadmund

Letter A/cross and pellets, obverse legend EADMVND REX AN

- I. +EADMVND REX AN- | +EADMVND MONE-
 1. *BMC* 54 ex G.Fox ex Gravesend hoard. 20.8gr. [Pl.2,15]
- II. +EADMVND REX AN- | +EADMVND MONE
 1. *BMC* 55 ex Gravesend hoard. 21.9gr.
- III. +EADMVND REX AN | +EADMVND MONE:
 1. *BMC* 56 ex Gravesend hoard. 21.0gr.
- IV. +EADMVND REX AN: | +EAOMVND MONE:
 1. *BMC* 57 ex S.Tyssen (1802) ex Rev.R.Southgate (1795). 18.5gr. (chipped).
 2. *SCBI American Collections* 233 (Johns Hopkins Univ.) ex J.W.Garrett (1942) ex Sir John Evans. 19.0gr.
- V. +EAOMVND REX AN | +EAOMVND MONE
 1. *BMC* 58 ex G.Fox ex Gravesend hoard. 20.1gr.
- VI. +EADMVND REX AN- | +EADMVND MONE-
 1. *SCBI Cambridge* 453 ex A.W.Young ex P.W.Carlyon-Britton (1912) 310 ex Montagu (1895) 359 ex W.Brice. 20.0gr.
- VII. +EADMVND REX AN | +EADMVND MONE-
 1. *SCBI Glasgow* 424 ex Dr W.Hunter (d.1783). 20.0gr.
- VIII. +EADMVND REX AN | +EADMVND MONE
 1. Glendining 13 Mar.1974 lot 69 (ill). Pierced in centre. (Note that this has a distinctive black patination.)

The following coins of this moneyer and type combination appear to have been of the variety with obverse legend ending REX AN; Napier (1916) 21; Nunn (1896) 63; Doulton (1888) 10; Christmas (1864) 38; Murchison (1866) 114, with pellets on reverse arranged as on *BMC* 57; Cuff (1854) 325 and 327 (one of the coins of this moneyer in the Cuff sale was later Lindsay (1867) 36); and Durrant (1847) 37, bt Cureton for J.A.Wigan, apparently ex Tyssen duplicates (1802) 86.

Same types, but with obverse legend EADMVND REX only

- | | | | |
|-------|--|--|---|
| I. | +EADMVND REX | | +EADMVND MO: (runic O) |
| 1. | <i>BMC</i> 59 perhaps ex S.Tyssen (1802) (ill. as Tyssen Ruding Pl.9,2), but more probably ex Cotton, ultimately ex Sir Robert Cotton (d.1631), and the coin ill. Fountaine Pl.V,22. 20.5gr. [Pl.2,16] | | |
| II. | Same obverse die | | +EA.DMVND MO (runic O) |
| 1. | <i>SCBI East Anglian Museums</i> 1073 (Bury St Edmunds Museum) ex Grantley (1944) 918 (ill). 21.2gr. | | |
| III. | +EADMVND REX | | +EADMVND MO (runic O) |
| 1. | <i>BMC</i> 60 ex G.Fox ex Gravesend hoard. 22.0gr. | | |
| IV. | Same obverse die | | +EADMVND MO (runic O) |
| 1. | <i>SCBI East Anglian Museums</i> 1074 (Bury St Edmunds Museum) ex Frost ex Drabble (1943) 827 (ill) ex P.W.Carlyon-Britton (1918) 1627. 21.1gr. | | |
| V. | +EADMVND REX | | same reverse die as <i>BMC</i> 60 (above) |
| 1. | <i>SCBI Cambridge</i> 454 ex T.J.G.Duncanson ex F.G.Smart. 21.0gr. | | |
| VI. | +EADMVND REX | | +EADMVND MO (runic O) |
| 1. | <i>SCBI Oxford</i> 62 ex Bodleian Library collection. Ill. Wise Pl.XVII,7. 17.3gr. (cracked). | | |
| VII. | +EADMVND REX | | +EADMVND MO |
| 1. | <i>SCBI Copenhagen</i> 103 ex L.E.Bruun ex Lawrence (1903) 11. 19.7gr. (slightly chipped). | | |
| VIII. | +EADMVND REX | | +EADMVND MO |
| 1. | <i>NCirc</i> Apr.1981, no.3104 (ill). | | |

The following also seem to have been of this variety: Grantley (1944) 917 ex L.A.Lawrence; J.H.Young (1881) 5 bt Brown; Bergne (1873) 83; Dymock (1858) 80 ex Barclay (1831) 135; Cuff (1854) 329 and 328.

The following were of this type and moneyer but may have been of either obverse legend variety: Maynard (1885) 17 and Powell (1877) 81.

Moneyer Eadwald

Letter A/cross and pellets

- | | | | |
|------|---|--|-------------------|
| I. | +EADMVND REX | | +EADPALD MON: |
| 1. | <i>BMC</i> 62 ex Cotton, ultimately ex Sir Robert Cotton (d.1631). 22.0gr. | | |
| 2. | <i>SCBI Norweb</i> 110 ex Lockett (1958) 2674 (ill) ex H.C.Miller (New York). 19.9gr. | | |
| II. | +EADMVND REX | | +EADPALDI MONE .. |
| 1. | <i>BMC</i> 61 ex Gravesend hoard. 21.4gr. | | |
| III. | +EADMVND REX | | +EADPALD MO |
| 1. | <i>BMC</i> 63 ex J.D.Cuff (1839). 21.2gr. | | |
| IV. | +EADMVND REX | | +EA.DPAL.D MO |
| 1. | <i>BMC</i> 64 ex Gravesend hoard. 20.8gr. [Pl.2,17] | | |

- V. Same obverse die | +EADPALD MO:
1. Bennett (1972) 606 ex Grantley (1944) 913 (ill), said in Grantley cat. to be ex Cuff, and therefore Cuff (1854) 337.
 2. SCBI Mack 676 ex Parsons (1954) 116 (ill). 24.2gr. (the weight is unusually high and the Mack coin may be a cast).
 3. SCBI East Anglian Museums 1075 (Bury St Edmunds Museum) ex Frost (1976). 22.2gr.
- VI. +EADMVND REX | +EADPALD MO.
1. BMC 65 ex Gravesend hoard. 19.1gr.
- VII. +EADMVND REX | +EADPALD MO:
1. BMC 66 ex Gravesend hoard. 21.0gr.
- VIII. +EADMVND REX. | +EADPAL.D MO:
1. BMC 67 ex Duke of Devonshire (1844) 35. 19.3gr. (chipped).
 2. Seen Messrs Baldwin 1976 (in A.H.F.Baldwin's private collection 1958) ex Sir John Evans ex Croydon hoard. Ill. Anderson no.1.
- IX. +EA:DMVND REX | +EADVVA:LD MON (N rendered by inverted V and I)
1. BMC 68 ex Gravesend hoard. 20.0gr. [Pl.2,18]
 2. National Museum of Wales ex Lockett (1955) 417 (ill) ex Reynolds (1914) 18 ex 'Astronomer' (F.McClean) (1906) 109 (ill) ex Montagu (1895) 358. Weight given Lockett cat. 18gr.
 3. SCBI Reading 36 ex Grantley (1944) 919. 18.6gr.
- X. +EA.DMVND REX | +EADVALD MON (retrograde)
1. BMC 69 ex Gravesend hoard. Ill. Haigh Pl.4,5. 20.2gr.
Nunn (1896) 64 had a retrograde reverse legend and may have been from this reverse die, although the moneyer's name is given as EADAVARD (sic) in the catalogue.
- XI. +EADMVND REX | +EADPALD MO
1. Royal Mint, no provenance. 16.8gr.
- XII. +[?EA]DMV.ND REX | +EADPAN MONET
1. Hon.R.Assheton ex Standly (1845) 40 bt Cureton for Assheton (bills in possession Assheton family).
- XIII. +E.ADMVND REX | +EADPALD MO:
1. C.E.Blunt ex NCirc Dec.1953 no.AS3 ex Duke of Argyll.
- XIV. +EADMVND REX | +EADPALD MO
1. SCBI American Collections 234 (American Numismatic Society), bt from Seaby 1959. 18.8gr. (slightly chipped).
The following were also of this general character: Boyne (1896) 1126; Marshall (1852) 18; Brumell (1850) 8.

Moneyer Ethelwulf

Cross and crescents/cross and wedges

- I. +EADMVND REX. | +EDELDVLF MOI-
1. BMC 71 ex Gravesend hoard. 23.5gr.

- II. +EADMVND REX | +EDELDVLF MOI-
1. *BMC* 72 ex S.Tyssen (1802). Ill. Ruding Pl.9,7. 18.0gr. [Pl.2,19]
- III. +EADMVND REX AN | EDELD.V.L.F + MON (retrograde)
1. *BMC* 73 ex Gravesend hoard. 21.6gr.
- IV. +EADMVND REX A.N | EDELVVLF + MON (retrograde)
1. *BMC* 74, acquired before 1838. 19.5gr.
- V. +EADMVND REX AN | EDELVVLF + MON (retrograde)
1. *SCBI Mack* 67 ex Grantley (1944) 919 ex W.Allen ex Croydon hoard. Ill. Anderson no.4. 13.6gr. (badly chipped).
- VI. +E[AD]MVND REX AN | same reverse die
1. *SCBI Yorkshire Museums* 965 (Leeds University) ex Winchester Cathedral Collection ex Eyre (1764). 16.8gr. (chipped).
- VII. +EADMVND REX AN | EDELDVLF + MON (retrograde)
1. Royal Mint, no provenance. 17.6gr.
A specimen listed *NCirc* Nov.-Dec.1919, no.76229, described as 'found at Reading', was of this type combination and character. Montagu (1895) 356 bt Lincoln ex Marsham (1888) 92 ex J.A.Wigan, described in the Montagu catalogue as 'slightly chipped at edge', was also of this type combination and had the legends +EADMVND REX AN and EDELDVLF + MON (retrograde).

Cross and crescents/cross and pellets

- I. +EADMVND REX AN | EDELVVLEX MON (retrograde)
1. *BMC* 75 ex Bank of England (1877) ex Robert Austen (d.1797). 20.7gr.
 2. BM ex T.G.Barnett (1935) ex P.W.Carlyon-Britton (1918) 1626 (ill) bt Barnett. 19.5gr.
 3. *SCBI Copenhagen* 99 bt from Spink 1917 ex Rashleigh (1909) 116 (ill) bt Douglas, said in Rashleigh MS catalogue in BM to be ex Dymock, and therefore presumably Dymock (1848) 55. 19.9gr.
- II. +EADMVND REX AN | EDELVVLEX MON (retrograde)
1. *BMC* 76 ex Gravesend hoard. 20.0gr.
- III. +EADMVND REX AN | EDELVVLF + MON (retrograde)
1. *SCBI Copenhagen* 100 ex L.E.Bruun ex Montagu (1895) 355 bt Bruun. 20.8gr.
- IV. Same obverse die as | EDELVVLE + MON (retrograde)
BMC 75 (etc)
1. Sir John Evans ex Croydon hoard. Ill. Anderson no.5.
The following were also of this general character: Reynolds (1914) 19; Boyne (1896) 1126 ex Murchison (1866) 118 bt Boyne; Bergne (1873) 80 bt Williamson; Christmas (1864) 39; and perhaps Cuff (1854) 334.

Moneyer Sigered

Letter A/cross and pellets

- I. +EADMVND REX | +SIGERED MON:
1. *BMC* 77 ex Gravesend hoard. 20.0gr.

- II. +EADMVND REX | +SIGERED MOI^T
 1. *BMC* 78 ex Gravesend hoard. 21.1gr.
- III. +EADMVND REX | +SIGERED MOE
 1. *BMC* 79 ex Gravesend hoard. 19.5gr. [Pl.2,20]
- IV. +EADMVND REX | +SIGERED MO^V
 1. *BMC* 80 ex Gravesend hoard. 19.0gr.
- V. +EADMVND REX. | +SIGRED MON^V
 1. *BMC* 81 ex Gravesend hoard. 22.2gr.
 2. *SCBI American Collections* 235 (American Numismatic Society) ex D.P. Dickie (1967) ex Ryan (1952) 659 (ill) ex Allen (1898) 195 ex Croydon hoard. Ill. Anderson no.3. 18.3gr.
- VI. +EADMVND REX | +SIDERED MONET
 1. *SCBI Glasgow* 425 ex T.Coats (d.1883). 19.4gr.
- VII. +EADMVND REX | +SIGERED MON
 1. *NCirc* Nov.-Dec.1923, no.25242, ex P.W.Carlyon-Britton (1916) 905 (ill). 21.5gr.
- The following were also of this type combination and general character: Bergne (1873) 82; Cuff (1854) 326; Hugh Howard (1874) 4, said to read SIBERED MONET (and therefore perhaps = *SCBI Glasgow* 425); Bank of England (1877) 84, said to read SIGERED MON; Richardson (1895) 22, said to read +EADMVND REX and +SIGERD (sic) MON; and *NCirc* Mar.-Apr.1916, no.39327 ex Sir John Evans ex Croydon hoard.

Letter A/cross and wedges

- I. +EADMVND REX AN | +SIGERED MONET
 1. Rebello collection. Ill. Ruding Pl.9,3.
 Lewis Sheppard (1861) 79 had these legends and although the reverse type is simply described as a cross, it may well have been of this type combination. Weight given Lewin Sheppard cat. as 17.2gr. 'Astronomer' (F. McClean) (1906) 108 bt Ready, ex Marsham (1888) 90, is described as being of this type combination, but the obverse legend is given as +EADMVND REX.

Moneyer Twicga

Letter Omega surmounted by horizontal bar/cross and pellets

- I. +EADMVND REX AN | +TPIC.C.A MON
 1. *BMC* 85 ex Gravesend hoard. Ill. Haigh Pl.IV,7. 20.7gr. [Pl.2,21]
- II. +EADMVND REX AN | +TPICCA MON
 1. Bird (1974) 59 (ill). 21.4gr.
- III. +EADMVND REX AN | +TPICA MON
 1. *BMC* 86 ex Gravesend hoard. 23.0gr. [Pl.2,22]
- IV. Same obverse die | +TPICA MON
 1. *SCBI Copenhagen* 104 ex L.E.Bruun ex 'Gentleman' (1903) 338. 20.5gr.
 2. *SCBI Glasgow* 426 ex T.Coats (d.1883). 18.7gr. (chipped).
 3. C.E.Blunt ex Ryan (1952) 660 (ill) ex Rashleigh (1909) 119, said in

Rashleigh catalogue to be ex Dymock and Cuff and therefore Dymock (1858) 82 ex Cuff (1854) 335. Weight given Ryan cat. 19½gr.

Letter Omega surmounted by cross/cross and pellets

- | | | |
|--|---|--|
| I. | +EADMVND REX AN | same reverse die as BMC 85 (above) |
| 1. | BMC 82 ex G.Fox ex Gravesend hoard. | 19.7gr. [Pl.2,23] |
| II. | Same obverse die | +TPICCA MON |
| 1. | SCBI Cambridge 455 ex A.W.Young ex P.W.Carlyon-Britton (1913) 312 ex Montagu (1895) 363, no provenance given in Montagu catalogue but stated in Carlyon-Britton catalogue to be ex Cuff, and identified in SCBI Cambridge volume as ex Dymock 82 and Cuff 335, although this provenance properly belongs to the Blunt-Ryan-Rashleigh coin listed above. 18.0gr. | |
| III. | +EADMVND REX AN | +TPICCA MON |
| 1. | BMC 83 ex Gravesend hoard. | 19.8gr. |
| IV. | +EADMVND REX AN | +TPICCA MON |
| 1. | BMC 84, acquired before 1782. | Ill. Ruding Pl.9,9. 18.6gr. (chipped). |
| V. | +EADMVND REX AN | +TPICCA MON |
| 1. | Glendining 24 Mar.1977 lot 310 (ill) ex Drabble (1939) 362 (ill) ex W.T.Ready. Weight given Drabble cat. 18gr. | |
| VI. | Same obverse die | same reverse die as SCBI Cambridge 455 |
| 1. | SCMB Apr.1980, no.E154 (ill). | |
| VII. | +EA.DMVND.REX AN | +TPICCA MON |
| 1. | BM ex T.G.Barnett (1935) ex NCirc Nov.-Dec.1923, no.25241 (ill), ultimately ex Cuff. Ill. as Cuff Haigh Pl.IV,9. 19.0gr. | |
| VIII. | +EADMVND REX AN | +TPICCA MON |
| 1. | Hermitage Museum, Leningrad. | |
| IX. | +E·ADNVND REX AN | +TPICCA MON |
| 1. | Bonham 4 Dec.1980 lot 706 (ill).
NCirc Sept.-Oct.1921, no.96442, ex Crompton-Roberts ex Richardson (1895) 23 ex Marsham (1888) 93, was of this variety. | |
| The following were either of this variety or the preceding variety: NCirc Mar.1955, no.13404; Parsons (1954) 117; Doulton (1888) 10; and Murchison (1866) 117. Christmas (1864) 41 and Dymock (1858) 56 were probably of one or other of these varieties also. | | |
| <i>Variety with pellets on either side of an anchor-shaped Omega and with obverse legend EADMVND REX</i> | | |
| I. | +EADMVND REX | +TPICCA MON |
| 1. | BMA 271 ex Sir John Evans ex Montagu (1895) 362 ex W.Brice ex Bergne (1873) 86 ex Cuff (1854) 336 bt Bergne. Ill. Haigh Pl.IV,10. 20.7gr. [Pl.2,24] | |
| 2. | SCBI American Collections 237 (American Numismatic Society) ex Lockett (1955) 418 (ill), no provenance given in Lockett catalogue but said in SCBI volume to be ex H.C.Miller (New York) (1920) 39. 18.9gr. (chipped). | |

ABBREVIATIONS USED IN THE LIST OF COINS

- BM Those coins in the British Museum acquired later than those recorded in *BMC* and *BMA*.
- Ruding R.Ruding, *Annals of the Coinage*, third edition (1840).
- Fountaine Sir Andrew Fountaine, 'Numismata Anglo-Saxonica & Anglo-Danica brevita illustrata' (1705), printed in G.Hickes, *Linguarum veterum septentrionalium thesaurus grammatico-criticus et archaeologicus* (Oxford 1703-05) pp.161-85.
- Anderson J.Corbet Anderson, *Saxon Croydon*, 1877.
- Wise F.Wise, *Nummorum antiquorum scriniis Bodleianis reconditorum catalogus* (Oxford 1750).
- Dolley & Strudwick R.H.M.Dolley and Mrs J.S.Strudwick (subsequently Martin), 'The Provenances of the Anglo-Saxon Coins recorded in the Two Volumes of the British Museum Catalogue', *BNJ* 28 (1955-57), 26-59.

PLATE 1

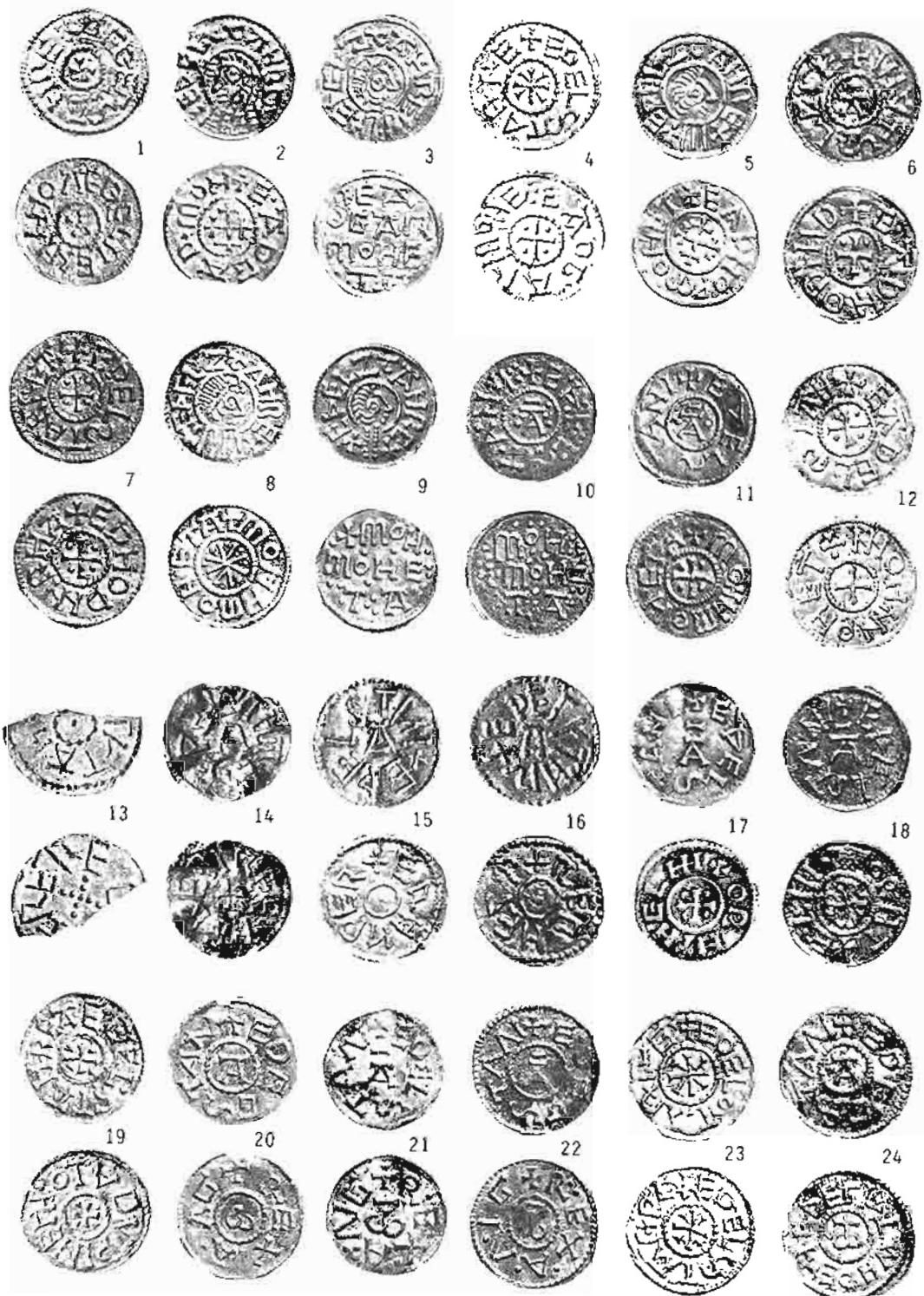
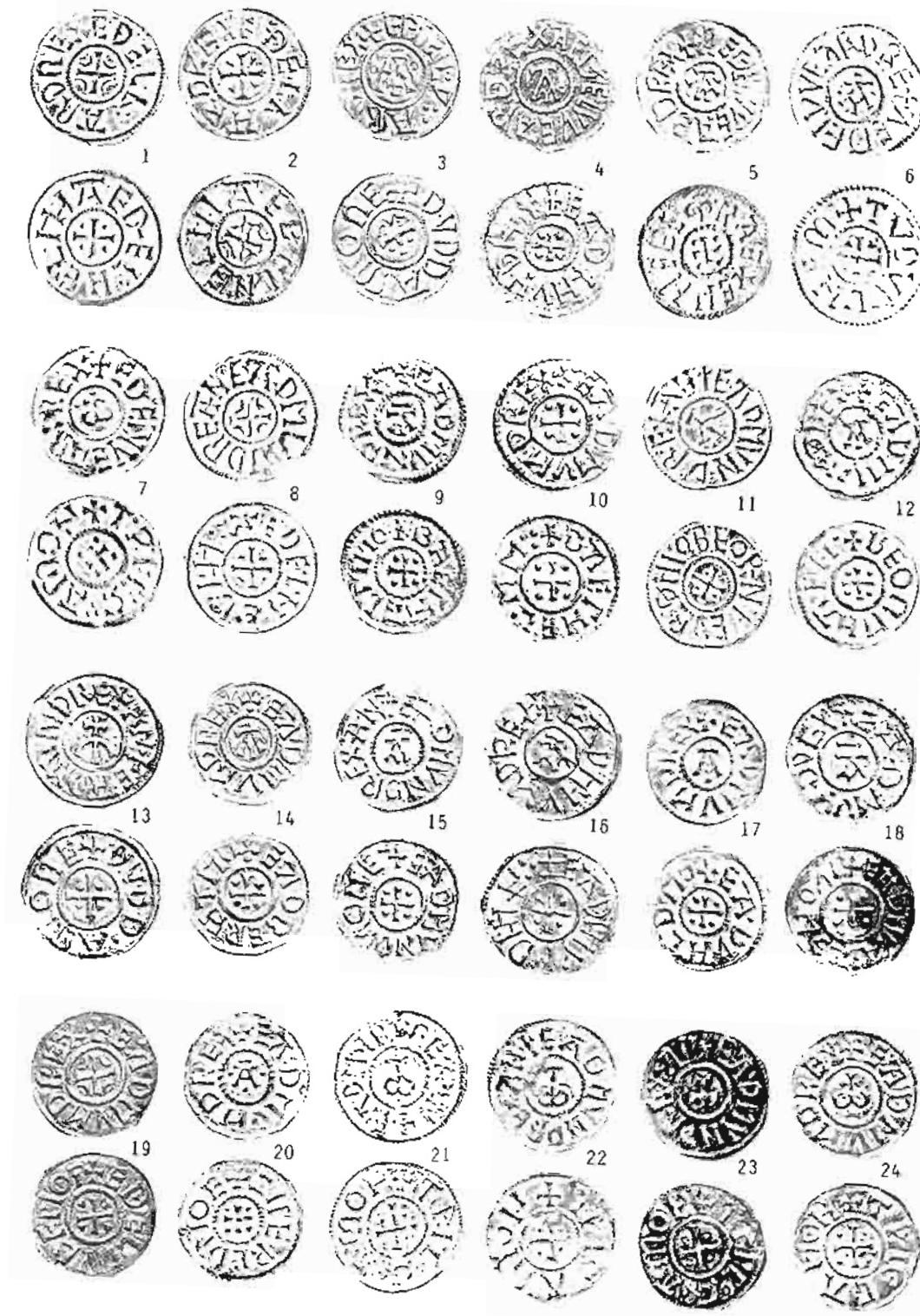


PLATE 2



THE RIPON HOARD, 1695:
CONTEMPORARY AND CURRENT INTEREST

Elizabeth J.E.Pirie

June 1695

17. Morning, writing to Mr Gibson with catalogue of my manuscripts; then read. All day writing and accounting, and poring upon some old Saxon coins lately found at Ripon.
20. Poring on the Saxon coins sent me by the Archbishop to unriddle.
21. Forenoon, writing to our learned and ingenious Dr Sharp, about the coins he sent me.

Ralph Thoresby¹

The exact day of discovery of the Ripon hoard in 1695 does not seem to have been recorded. Thoresby may have been working on the coins for some time before the first reference in the diary or, perhaps, they may only just then have reached him in Leeds. Certainly, he had at least had news of the find some time before, as is indicated by part of a letter to him written by William Nicolson, Archdeacon of Carlisle, on June 15:

You have mightily raised my fancy with your postscript; and I cannot but long to hear further from you, about the great discovery of the Saxon coins you mention. If you secure any duplicates among them, I hope you will let me come in for a sharer with you; at least, if any of them relate to the kingdom of Northumberland, you will not fail of imparting your observations. Since the study of Antiquities comes so much in vogue, I suspect we shall shortly begin to counterfeit old coins as readily as we now do the more current money of England.²

An undated letter from Dr Thomas Gale, afterwards Dean of York, has a more terse reference to the discovery:

Your account of the Ripon coins is more particular than what I had received, with some old pieces brought me thence. I expect yet from thence a further account.³

The next letter from Nicolson (undated) begins:

Your last came soon after I had returned some few of the Saxon coins, which were sent to me by the post, from Bishop-thorp;⁴ I was troubled that I had not kept them longer, or received your letter sooner. The kind account you gave me of the rest, might have enabled me to make better guesses, than, I doubt, it will be thought I have done. I suppose them all to have been named anciently stycas and eight of them (as now the Liards de France) to have made a penny. This conjecture I ground upon our Saxon version of Mark xii.42. But, truly, to what king any of the five that were sent me are to be attributed, I know not. I am still more greedily desirous to see more of them, since you tell me they are mostly coins of our Northumbrian monarchs.

The same letter ends:

As duplicates of the Saxon pieces (*stycas*) come to your hand, remember your promise...⁵

On 25 November, Nicolson wrote again:

Half a score coins of our old Northumbrian kings are a treasure, which (as soon as ever I came to myself) I could not but esteem above all the riches of the French monarch... Without compliment, and by all the faith of my masters, the Antiquaries, I am proud of your token. I have not yet had leisure to consider the several pieces, but, as soon as it is possible for me, I shall gratefully impart my conjectures upon them. I doubt not but you are right in your reading of such inscriptions as your's brings me. I think I told you that these pieces...I look upon as those which our ancestors called *stycas*, two whereof made a farthing; like the widow's mite in the Gospel, where we meet with this word.⁶ You cannot more oblige me than by communicating your observations on such others of them as relate to the kingdom of Northumberland, which, perhaps, they all do.⁷

On 1 August 1696, while he thought that Thoresby was still unriddling the coins,⁸ Nicolson made another plea:

If you have observed any more, in your late discovered brass coins, that relates to my Northumberland,⁹ you will continue your kindness in imparting it.¹⁰

The exact number of coins recovered in the 1695 find is not recorded, nor are details of their eventual dispersal. Thoresby's own parcel was small. The *Ducatus* lists thirty-nine *stycas* not all of which, apparently, were from the hoard¹¹ (One of them, Eanred/Herred, only appears in the Appendix and is believed to have been acquired after 1709).¹²

As part of the annotation for the first which he registered in the main text Thoresby commented: 'This and most of the same Metal that follow, were of those found at *Rippon*, An. 1695'. His use of the word *most* raises the tantalizing question of there having been specimens in his collection from another find. Careful scrutiny of his museum accession register has failed to trace any record of *stycas* from another place,¹³ although there is the possibility that an undated gift which included '4 Saxon Coyns found at Rippon' may have been of *stycas* found there in some year other than 1695, perhaps even before 1678.¹⁴

Thoresby's published list does not include all the *stycas* in his possession from the 1695 discovery; he sighed openly over the identity of two whose legends were incomprehensible: 'such were the intollerable Bunglers of that Age'. More than a dozen must have remained too much of a mystery to mention in his printed account.¹⁵ The *Ducatus*, after all, was not a vehicle for hoard reports. Since Thoresby had already helped his friend Sir Andrew Fountaine by lending coins, including a number of the Riper *stycas*, for illustration in the latter's work,¹⁶ he did not represent them again on his own plates. He did, however, provide a comment on the site:

The Name of the particular Place where these venerable, tho' obscure, Remains of the old Northumbrian kings were digged up, is now called *Allice-Hill*, no doubt from *Alla's-Hill*. He was slain, An Dom. 867 as the Saxon Chronicle affirms; not 926 as Speed and from him Isaacson, mistake. Camden says this Hill was called *Hillshaw*, and Tradition will have it to be thrown up by the Danes; it is full of humane Bones a Foot beneath the present Surface.¹⁷

Thoresby published the *Ducatus Leodiensis* in 1715, after some thirty-five years of antiquarian studies and collecting material for his museum. His father, who died in 1679, had also been interested in antiquities and had bought a collection of coins and medals from Lord Fairfax's executors; this formed the nucleus of Thoresby's own coin collection.¹⁸ His son, Ralph, inherited both museum and library in 1725, when the elder Ralph died at the age of sixty-seven; the material remained in the Thoresby family till 1764 when, at the end of the third generation of interest in antiquities, the collections were sent for auction in London.¹⁹ Sixty-seven Northumbrian pieces - a sceat and sixty-six stycas, were dispersed in six lots, realising £10.7s.0d.

John Sharp, who was born in Bradford in 1645, became Archbishop of York forty-six years later. He was to remain at York for twenty-three years, until his death in 1714. His association with the hoard discovered at Ripon in 1695 has at least been recorded by Thoresby, but is still somewhat ill-defined. Although the clergyman had started collecting coins in 1687,²⁰ one suspects that it was his ecclesiastical position rather than his numismatic reputation which may have earned him from the Dean and Chapter of Ripon early news of a find in the cathedral city and initial custody of the coins. It was he who gave his friend in Leeds the opportunity of studying, perhaps for several months, most of the material which had come to him first. One begins to wonder if he did receive all the coins which had been recovered: the lack of record of the total number involved²¹ suggests that Sharp and Thoresby may have seen only a small part of the entire find, yet the complete absence of any comment in the Thoresby papers about locating other specimens for study may be more re-assuring. If Sharp did obtain possession of them all, it may have been he who, after giving some to Thoresby, eventually dispersed other parcels. Gale and Sir Roger Beckwith may have acquired their specimens from the archbishop, in which case others in outstanding positions may also have been the recipients of souvenir selections, made according to the identifications of that time.

It does not seem to have been appreciated that, like Thoresby, Sharp lent some of the stycas he retained for himself to Fountaine for illustration in the work published in 1705.²² This perhaps underlines Sharp's real interest in recording such material, which would have ensured that the find was studied before most of the coins were dispersed.

There has been a canard recorded²³ to the effect that Sharp left his coin collection to his friend Thoresby; this is not true. It is only in recent years that some part of the total collection has left family possession;²⁴ the archbishop's early Northumbrian coins are still the property of his descendants.

The group of seventy-six coins listed here includes three sceattas which are obviously not from the hoard and have no recorded provenance. Sharp's long residence at Bishopthorpe, York, compels one to admit the possibility of his having acquired stycas which were local finds. Inspection of the Sharp specimens has, however, not led to recognition of any with patination clearly distinct from that of the rest which would imply a source other than the Ripon hoard for some one or two pieces in the group. There are certainly no coins of moneymasters who occur rarely in the hoards of York and district although they may be represented in site finds from the area.

Although the exact size of the Ripon hoard of 1695 is in doubt, its composition seems to have been what one might expect in the southern part of Northumbria. It is perhaps surprising that Redvulf cannot be recognized

in the Thoresby parcel or found in that of Sharp; Eanbald can only be recorded by a single irregular issue, but the scarcity of that archbishop's coins is a feature of the southern hoards.

It is no part of the present intention to spell out other characteristics of the hoard, such as the absence of the early silver issues of Eanred, the presence of coins of Osberht and the inclusion of a considerable number of imitations from the group which for a quarter of a century now has been identified as derivative and late; all these features certainly relate the Ripon discovery to the various hoards of York and Bolton Percy rather than to that of the earlier deposit further north at Hexham. In the situation where preparation for publication of the massive collection of stycas in the Yorkshire Museum, York, is still far from complete, it is as yet much too early to offer any new discussion of the full significance of the known hoards, their content and dates of deposition. One of the preparatory projects is the compilation of an inventory of styca finds and it is as a step in this direction that the Thoresby records have been sifted at length to dredge up the likely identity of coins one might associate with the occurrence of a minor (stray) find in the area, before the discovery of the 1695 hoard itself. That the exercise has brought a number of early publications into line for relevant bibliographic entries is incidental. Apart from this, the Sharp parcel from Ripon affords some forty items which fill gaps in the representation of the coinage in the York cabinets. Reference to these coins will be essential in the eventual ordering of the York material.

At this stage, pending the illustrations of the York stycas in *Sylloge* format (when it is hoped that they will demonstrate the relationships of individual coins to others through die-links, particularly in the various divisions of irregular coins), it remains difficult to list clearly small parcels of coins which may contain no more than one or two specimens from a particular group. Allowing that the main purpose of this present note is to illustrate the Sharp stycas, the Thoresby and Sharp coins can only be listed in summary form. Detail of the former has been derived mainly from the register in the *Ducatus* and illustrations on Fountaine's Plate X.²⁵ The accompanying chart (Fig.1) is the key to the notation used for the motif combinations: 5/5, for example, indicates that the motif is a small cross on both obverse and reverse. There is still no exact chronological significance in the grouping within a reign.

Ripon 1695: The Thoresby parcel

Motifs can be recorded only for specimens illustrated in 1705. (It is the *Ducatus* numbers which are cited in the Appendix and notes.) In this listing D = *Ducatus*, F = Fountaine Plate X, and C = W.Camden, *Brittania*, edited by Edmund Gibson (1722), Plate V.

i. Regular issues

EANRED c.810-41

1. Brodr. 3/4; +EANREDREX, retrograde; +BRODR; same dies as Sharp 4. (D 31; F 2; C 8)
2. Fordred. 5/5; +EANREDRE; +FORDRED (D 32; F 3; C 6)
3. Monne. 2/4; +EANRED; +MONNE, retrograde (D 33; F 5; C 7)
4. Vvlfred. 5/5; +EANREDREX; +VVLFRED (D 30; F 1; C 5)

AETHELRED c.841-44; 844-49

(Asterisks denote that the L of EDILRED is inverted)

I	•	3		5	+	7	
1a	*	3a		5a		7a	
1b	*	3b		5b		7b	
1c		3c		5c		7c	
2		3d		5d		7d	
2a						8	
2b		4		6		9	
2c		4a		6a		9a	
2d		4b		6b		9b	
2e		4c		6c		10	
2f		4d				11	

Fig.1. Motifs on Northumbrian sceattas and stycas.

- a) Moneyers attributed to first reign.
- 5. Eanred. 5/6; +EDILREDREX*; +ANRED (D 39; F 3; C 10)
- 6. Monne. The reverse, retrograde (D 44)
- 7. Leofthegen. Obv. legend, EDELRED (D 42)
- 8. Vendelberht. 5/5. +EDILRED RE; VENDELBERHT, (no initial cross?) (D 40; F 4; C 12)
- 9. Vendelberht. 'somewhat different' (D 41)
 - b) Moneyer attributed to second reign.
- 10. Eardvulf. Obv.: +EDILRED REX* (D 45)
- 11. Eardvulf. ?/4 (?); +EDILRED RE; +EARDVULF (D 35)
- 12. Eardvulf. ?/1a; +EDILRED; +EARDVULF (D 34)
- 13. Eardvulf. No further detail (D 36)
- 14. Eardvulf. +EDILRED R; +EARDVULF, retrograde (D 37)
- 15. Eardvulf. +EDILREDREX*; +EARDVULF, retrograde (D 38)
- 16. Eardvulf. 5a/2b; +EDILRED REX; +EARDVULF; (?) another specimen, noted in MS; cf. Sharp 24)

OSBERHT c.849-67

- 17. Eanvulf. 1/5; +OSBERCHT; +EANVVLF (D 59; F 2; C 20; cf. Sharp 32)
- 18. Eanvulf. 'different only in the Central Points'. (D 60)
- 19. Monne. 3/5; +OSBVCHT REX; +MONNE, retrograde (D 61; F 1; C 18)
- 20. Monne. 'Form of the Letters and Points so different as evidence another Mint' (D 62)
- 21. Viniberht. 5a/3. +OSBLRCHT; IVNIBERHT (D 63; F 4; C 19; cf. Sharp 33)
- 22. Viniberht. No further detail (D 64)
- 23. Vvlfisixt. 5/5. BOSB'ERHT; +VVLFSIXT (D 65; F 3; C 22) It should be noted that this reverse is known to be a dominant die - that is, it was used with a variety of obverses; since the latter are aberrant in detail, the coins can hardly be accepted as wholly regular (cf. Sharp 74).

. ii. *Irregular issues*

- a) temp. EANRED.

- 24. Vilheah. 6/3; Obv. uncertain; +VILHEAH, retrograde; same rev. as 25? (D 68; F Alla 1)
- 25. Vilheah. ?/3; Obv. uncertain; +VILHEAH, retrograde; same rev. as 24? (D 69; ?F Alla 2; C 23)

- b) early AETHELRED?

- 26. Brother. 5/4; EDELRETRE; +VBRODER; same dies as Sharp 40 (D 26; F Ethelbert 1; C 1)
This now BMC Northumbria 281, ex Tyssen, 1802?

- c) AETHELRED - OSBERHT

Representatives of a massive die-linked chain.

27. Roen. 6/5. +EDELREV; +ROEN, retrograde. (D 47; F 7; C 14)
28. Wihtred. +EDILREVD+; +PINTRED; ? both legends retrograde. (D 53)
29. Wihtred. 'somewhat different' (D 54)
30. Odilo. 1/5; +EILREDRE; +DDILD; both legends retrograde (D 28; F Alred 4; C 2)
31. Eardvulf. 5a/5; Obv. uncertain; +EARDVVF; both legends retrograde (D 48; F Eardvulf 4)
32. Uncertain. +EDILRED; +IEDM.... (D 46)
 - d) MISCELLANEOUS
33. Brother. 5a/5 ?; Obv. uncertain; +BRODER; both legends retrograde (D 49; F Eardvulf 5; C 16)
34. Brother/Edilhelm (sic). No further details: a double reverse for these two moneymasters is not otherwise recorded; possibly the same as Sharp 58. (D 50)
35. Wulfred/Coenred. 2/5. +VVLFRED; +COENRE; both legends retrograde. (D 67; F Wulfred 2)
36. 'Wulfred'. 5/2; +EDREDILL; +VIVRED; both legends retrograde. (D 27; F Alred 3; C 3; same dies as Sharp 69)
37. Uncertain. Rev. : LNAMR, trefoil of pellets in place of initial cross. (D 66)
38. Uncertain. 5b/5; legends uncertain. (D 29; F Alred 2; C 4)
39. Uncertain. Mis-struck and incomprehensible (F Alla 3 - not certainly Thoresby's)

There are no details of further stycas of Thoresby's. In view of the fact that the styca of Vigmund/Edelhelm (Sharp 30) illustrated in Fountaine was not there recognized for what it was, it may be unwise to assume that Thoresby had no such episcopal issues in his parcel. Rather, one could accept that such pieces may have remained unidentified, as may also have been the case with stycas of Redvulf.

Register of the Sharp Collection of early Northumbrian coins

What follows is only the very briefest of records of the seventy-six eighth- and ninth-century coins in the collection formed by John Sharp, Archbishop of York, 1691-1714. The specimens were seen by the present writer for only a few hours and the first priority was to photograph them all; there was no opportunity for recording either weights or die-axes. All the specimens are illustrated. Abbreviations are as in the Thoresby list above.

- A. Eighth-century sceattas: unprovenanced
EADBERHT, c.737-58
1. EOTBEREhtTVS, 5; animal to left.
ECGBERT, Archbishop of York and EADBERHT, c.737-58
2. ECGBERT: archbishop, at left, with two crosses; EOTBEREhtTVS, 5.
3. ECGBERT: archbishop, at left, with cross; OTBEREhtTVS, 6a.

- B. Ninth-century stycas: believed to be from the Ripon hoard, 1695
- i. Regular issues
 - EANRED, c.808-41
 4. Brodr. 3/4; +EANREDREX, retrograde; +BRODR; same dies as Thoresby 1.
 5. Folcnod. 5/5; +EANREDREX; +FOLCNODM; both legends retrograde. (F 4) AETHELRED II, c.841-44; c.844-49
- Asterisks denote that the L of EDILRED is inverted.
- a) Moneyers attributed to first reign.
 6. Brother. 5/5; +EDILREDREX; +BRODR.
 7. Cunemund. 5/5; +EDILREDREX*; +CVNEMVXD (X as runic N)
 8. Eanred. 2/2; +EDILREDREX*; +EANRED.
 9. Eanred. 5/5; +EBFLREDREX; +EANRED (F 2)
 10. Eanred. 5/4; +EDILREDREX; +EANRED; same obv. as 11.
 11. Eanred. 5/4; +EDILREDREX; +EANRED; same obv. as 10.
 12. Fordred. 5/5; +EDILREDRI; +FORDRED.
 13. Fordred. 5/2; +EDLIREDRE; +EORDRED.
 14. Leofthegen. 5/5; +EDILRED REX*; +LEOFDEGN (F 5; C 13)
 15. Monne. 5 ?/1; Obv. uncleaned; +MONNE.
 16. Monne. 5/5; +EDLIREDRE; +MONNE.
 17. Monne. 5a/3; +EDILREDREX; +MONNE; same obv. as 20, Vulfred.
 18. Vendelberht. 5/5; +EDILREDRE; +VENDELBERHT.
 19. Vendelberht. 5/5; +EDILREDRE, retrograde and the letters reversed; +VENDELBERHT.
 20. Vulfred. 5a/2b; +EDILREDREX; +VVLFRED, mis-struck; same obv. as 17, Monne.
 - b) Moneyer attributed to second reign.
 21. Eardvvlf. 4/2a; +EDILREDRX, retrograde; +EARDVVLF.
 22. Eardvvlf. 5/1b; +EDILREDREX; +EARDVVLF.
 23. Eardvvlf. 5a/1b; +EDILREDREX; +EARDVVLF.
 24. Eardvvlf. 5a/2b; +EDILREDREX; +EARDVVLF. (F 1; C 9; cf. Thoresby 16a)
 25. Eardvvlf. 5b/2; +EDILREDREX; +EARDVVLF; same obv. as 26.
 26. Eardvvlf. 5b/2b; +EDILREDREX; +EARDVVLF; same obv. as 25.
 27. Eardvvlf. 5b/4; +EDILREDRE; +EARDVVLF.
 28. Eardvvlf. 4/5; +EDILREDRE; +EARDVVLF.
 29. Eardvvlf. 5b/6; +EDILREDREX; +EARDVVLF.
 - VIGMVND, Archbishop of York, c.837-54.
 30. Edelhelm. 5/5. +VIGMVND; +EDELHELM (F Ethelhelm 1).
 31. Hunlaf. 3/3. +VIGMVND; +HVNLAF (F Anlaf 2).

- OSBERHT, c.849-67.
32. Eanvlf. 1/5. +OSBERCHTR; +EANVLF (F 2; C 20; cf. Thoresby 17)
 33. Viniberht. 5a/2; +OSBCRCHE; IVNIBEIRHT, no initial cross; same obv. as 34. (F 4; C 19)
 34. Viniberht. 5a/5b; +OSBCRCHE; VINIBERHT, no initial cross; same obv. as 33.
- VVLFHERE, Archbishop of York, c.854-900.
35. Vulfred. 5b/5; VVLFHERABED; no initial cross; +VVLFRED, retrograde.
 - ii. *Irregular issues*

Late EANRED?

36-37: imitations of irregulars known in the Hexham hoard?

 - 36. Nonsense. 2/2; +IERIEV; +VDRV; (the same dies as Bolton Percy, 1847, 461)²⁶
 - 37. Nonsense. 5/1; +EVNVNV; +DVEVV, retrograde.
 - 38. Eadvlf. 5/5; ENA+BAR; +EAOVVLF (F Eardvlf 3); now identified as an imitation of a coin of Archbishop Eanbald.
- Late EANRED – early AETHELRED
- a) *Pellet-in-annulet group*
 39. 'Wernuth'. 2/4; +ANTEDI, retrograde; +PERNVB; the Wernuth die is also known in combination with two others (Bamburgh, 1971, unpublished)
 40. Brother. 5/4; +EDELRETRT; VBRODER; same dies as Thoresby 26.
 - b) 'Hvaetred' group (so-called, because the coins represent a series in which, at York, the early moneyer Hvaetred is reflected)
 41. Eardvlf. 6/7d. +EDILRED: +EARD....; both legends retrograde.
 42. Nonsense. 5/5; +EEIVVNI; EVR.; both legends retrograde.
 43. Nonsense. 5/5; +EANA; +... RVT.
 - c) 'Hexham – included'.
 44. Nonsense. 3/3 ?; +VVIIRV, retrograde (the die known in Hexham hoard); +E...B, retrograde.
- AETHELRED – OSBERHT
- Specimens reflect a massive die-linked chain of issues.
45. Nonsense. 6/3; AEDILRE+ED, retrograde; +EDEV+VV; same obv. as 46, same rev. as 47.
 46. Nonsense. 6/3; AEDILRE+ED; +E...VV; both legends retrograde; same obv. as 45.
 47. Nonsense. 3/3; +EDILREDRE, retrograde; +EDEV+VV; same rev. as 45.
 48. Edelhelm. 6/4?; +EDILRE; EDELH...
 49. Odilo. 6/3; +EDELREV; +ODILO; retrograde; same obv. as Thoresby 27.
 50. 'Ediluth'. 7d/5; +EV+DDVLE, retrograde; +EDILVB.
 51. Vulfred. 5/5; +EDILREVD+, retrograde (cf. Thoresby 28-29); +VVLFRED (F Wulfred 1)

52. Nonsense. 5/5; +EDILREVD+; +EDIIRIX; both legends retrograde.
53. Nonsense. 2/2; +EDILRED, retrograde; +IIIIVV..; same obv. as 54.
54. Nonsense. 2/2; +EDILRED, retrograde; IVIIVIVI; same obv. as 53.
55. Nonsense. 5a/5; +EDILREDR; +VVNDAE; both legends retrograde.
56. Nonsense. 3/5; +EDVIIIVIIIE, retrograde; +NVDEII.
57. Double obverse. 5/5; AEDILRED; +EDILREDRI; both legends retrograde.
58. Edelhelm. 1/4; BOSBERH, retrograde (trefoil of pellets in place of initial cross); +EDELHELM; same dies as 59. (F Ethelhelm 2; C 17)
59. Edelhelm. 1/4; BOSBERH, retrograde; +EDELHELM; same dies as 58.

Other AETHELRED

- a) Representatives of a die-linked chain.
60. Eadvini. 4d/5; +EILREDRE; +EADVINI; both legends retrograde. (F Alred 1)
61. Nonsense. 6/2; +EDILREDX; +INVVED, retrograde.
62. Eardvulf. 5b/5; +EDILREDREX; +EARDVVLF, retrograde.
63. Eardvulf. 5a/3; +EDLI...VE, retrograde; +EARDVVLF.
64. Eardvulf. 6/5; obv. uncertain; +EAEDVVLF.
65. Odilo. 6/5; +EARDVVC; +ODILO; both legends retrograde.
- b) Miscellaneous.
66. Nonsense. 5a/1; +EDED..IIILI; +.EVVIDVI; both legends retrograde.
67. Eardvulf. 6/5; +ILREDRE, retrograde; +EARDVXI.
68. Eardvulf. ?2/1; +EDREILRDE, retrograde; +EARDVVF.
69. 'Vlfred'. 5/2; +EDREDILL; +VIVRED; both legends retrograde. (F Alred 3; same dies as Thoresby, 36)
70. Monne. 2/2; +EDLIREDRE; +MONNE, retrograde; same dies as 71. The obverse, aberrant, is known for Fordred (Eordred).
71. Monne. 2/2; +EDLIREDRE; +MONNE, retrograde; same dies as 70.
72. Uncertain. 5a/?; +EDILREDE; retrograde; rev. uncertain.
73. Uncertain. ?3/?5; +VIDEV; +IVENO.

OSBERHT

74. VvlfSixt. 5/5; BOSBERHT, no initial cross; +VVLFSIXT. (see note to Thoresby 23)
75. Viniberht? 5/5; legends uncertain.
76. Monne. ?/5; obv. obscured; +MONNE, retrograde.

The hoard can now be summed up by the following synopsis in Inventory format:²⁷

RIPON, Yorkshire, 1695

'A considerable number' (total uncertain) of AE Northumbrian stycas, found at Ailcey Hill, near the Cathedral; about 137 recorded in varying detail.

Deposit: temp. Osberht.

Original disposition:

- (1) Sharp of York, 73: Eanred, 2; Aethelred, 24; Osberht, 3; Abp. Vigmund, 2; Abp. Vulfhere, 1; Irregular, 41.
- (2) Thoresby of Leeds, 264: Eanred, 4; Aethelred, 12; Osberht, 7; Irregular, 16; Unpublished, 225. Dispersed at auction, 5-7 March 1764.
- (3) Nicolson of Carlisle: 10.
- (4) Gale and others: unknown.

Publication

Fountaine (1705), illustrations on Tab.X; Thoresby (1715), p.341 ff. and (1816) *Antiquities*, p.53 ff; Camden (1722, 1753 and 1806) Tab.V; *Archaeological Journal*, 3 (1846), 73; Walbran (1874), p.7; Surtees Society, LXXX (1885), 361; N.Heywood, 'The Stycas of Northumbria', *Trans. of the Lancs. and Cheshire Antiquarian Society*, 15 (1897), 83. Reprinted as a separate booklet in 1899, p.4; C.Hallet, *Ripon - The Cathedral and See* (1901), p.9; *Victoria County History, Yorks.* II (1912 and 1974 reprint), 103; J.D.A.Thompson, *Inventory of Coin Hoards of the British Isles, AD 600-1500* (1956), no.317; Metcalf (1960), no.43; W.MacKay, 'The Development of Medieval Ripon', *Yorks. Archaeological Journal*, 54 (1982), 76.

APPENDIX A. 'Northumbrian coins in Thoresby's early collection

An attempt to establish how many stycas Thoresby had before the discovery of the Ripon hoard and, more particularly, their source, involves first taking account of illustrations in two seventeenth-century publications for which plates were compiled by Obadiah Walker of Oxford. Walker borrowed from various sources material for reproduction in *Aelfredi Magni Vita*, the Latin edition, by Christopher Wase, of Sir John Spelman's *Life of Alfred the Great* (Oxford, 1678). Thoresby - father John, perhaps, rather than Ralph himself - contributed specimens for inclusion, although there was at the time no printed acknowledgement of this help.²⁹ In his introductory notes to the register of his Anglo-Saxon coins in the *Ducatus*, where he distinguished issues in silver and in brass, Thoresby claimed to have had three specimens of the latter metal recorded in the 1678 Spelman plates. It may be thought that, at that date, copper stycas in the Thoresby cabinet could only have come from the Fairfax collection which was bought by John Thoresby. Be that as it may, for the Gibson edition of Camden's *Britannia* in 1695, Walker derived some illustrations from both his own earlier work for the Spelman volume and John Speed's *Historie of Great Britaine* (1614). By 1693 Walker and Thoresby were in direct contact over the matter of numismatic illustrations for the new edition of *Britannia*. It would seem from the *Diary* (15-19 August 1693) that the initial request for assistance with specimens came to Thoresby from the editors and that he subsequently corresponded with Walker.

There is, in Leeds Grammar School, an undated Thoresby manuscript headed 'Additional Notes upon the Saxon Coins for a designed new Edition of the Britannia at Dr Gibson's request', which may relate to this period. Some might think that it is a copy of a memorandum composed as a commentary on the 1695 plates while Thoresby was helping with the preparation of the 1722 edition (certainly Gibson had no doctorate as early as 1693-95). The document seems, however, to be quite distinct from another which is clearly relevant to 1722; one may then dispute its later attribution on the

grounds that the list includes no more than four, possibly five, items which can be accepted as ninth-century Northumbrian. Those seem to be noted with a sense of unfamiliarity which one would not expect from Thoresby after his work on the Ripon hoard; the absence of the word *styca*, a term Thoresby did not adopt until 1695, seems to confirm early composition. The document may perhaps be seen as a list of the items he proposed to contribute from his own collection for Gibson's first edition.

One must not dismiss the possibility that these five pieces in Thoresby's cabinet may be given a Ripon provenance, having come to light as a stray find at some stage before the hoard was discovered: his museum register notes an undated gift of coins from a Mr John Knaresborough which included '4 Saxon Coyns found at Rippon' (? was a fifth at first not recognized for what it was).²⁹

If, indeed, Thoresby had five *stycas* in his collection before 1695, only the Aethelred/Monne seems to have remained to be recorded in the *Ducatus* in 1715. Perhaps other specimens were in poor condition and Thoresby was quite ready to part with them once he had better pieces from the hoard.

The following are schedules of the relevant coins:

- i) Spelman, *Aelfredi*, *Tabula VI*, compiled by Obadiah Walker.
- 2. Worn; obv.: central A; rev.:GN, retrograde.
- 21. Edilred/Monne.
- 22. Eanred/Fordred.
- 23. Osberht/Eanvulf: the obverse and aberrant reverse are transposed.
- 24. Heareth/Herreth: double reverse of Eanred's moneyer Herred.
- 25. Irregular: +:A PNAD/+ADV.....
(N is reversed, third A un-barred)
- ii) Camden, *Britannia* (1695), *Tabula V*, (p.cxxxv), compiled by Obadiah Walker. (Copied as Tab.I in 1722, with notes by Walker and Thoresby.)

Eighth-century sceattas

- 5. Eadberht/fantastic animal, left: illustration adapted from Speed (1614 edition, p.329) - the reverse has been touched up; specimen attributed to Thoresby (*Ducatus*, 1715, p.341, 25 which cites this publication).³⁰
- 6. Ecgberht/Eadberht: source unacknowledged; the illustration cannot now be matched with the Cotton specimen³¹ (*BMC Northumbria* 4), or with either of those in the Sharp collection.

Ninth-century stykas

- 8. Uncertain/Eadvini (labelled as silver but AE, possibly irregular): illustration adapted from Speed (1614 edition, p.305); specimen not attributed to Thoresby but perhaps from his collection.
- 9. Eanred/Eadvini: illustration derived from Speed (1614 edition, p.332) - the original Cotton example³² now thought to be *BMC Northumbria* 92; specimen not attributed to Thoresby but perhaps from his collection. The piece seems to have been re-drawn for Fountaine, X, Eanred 6.
- 11. Aethelred/Monne: labelled as silver; Spelman VI, 21; source unacknowledged; copied in Fountaine, X, Ethelred 6 (AE) and with the latter publication cited by Thoresby for his specimen (*Ducatus*, 1715, p.342, 43).

12. Eanred/Fordred: labelled as silver; Spelman VI, 22; source unacknowledged but perhaps from Thoresby's collection.
29. A worn specimen (labelled as silver) for which the textual comment is: 'The twenty-ninth I do not understand'. The obverse motif is A and, if silver, the coin could be one of Eanred's Eadvini but since, like Monne and Fordred, it is more likely to have been copper,³³ the Alpha issue of Aethelred's Leofthegn can be suggested as its identity. Spelman, VI, 2; source unacknowledged; it was perhaps from Thoresby's collection.
31. Osberht/Eanvulf: Spelman, VI, 23; source unacknowledged; copied in Fountaine, X, Osbright 5; concerning this specimen, Thoresby commented (*Ducatus*, 1715, p.343): 'W[alker] had somewhere met with an Osbright'.
32. Irregular (*temp. Eanred*), double reverse of Herred: Spelman, VI, 24; source unacknowledged; copied in Fountaine, X, *Incertum* 2. Not Thoresby's?
33. Irregular ('Hexham' style): Spelman, VI, 25, source unacknowledged; copied in Fountaine, X, *Incertum* 1. Not Thoresby's?
- iii) Thoresby MS (coins in his collection, c.1693?)
8. EALRED REX (Nr) Rev. EADVINE [sic]
9. EANRED REX (North) EADVINI [sic]
10. ?
11. EDILRED Rev. MONNE
12. EANRED REX FORDRED

It is suggested that for the 1695 publication, 8 and 9 were not drawn directly but illustrations from Speed were used, the first (No.8) being amended to allow of the obverse legend relating to Thoresby's reading EALRED. It is suggested, too, that the unidentified No.10 in Thoresby's list was reproduced as No.29, No.11 as No.11 and No.12 as No.12. (No.10 – a London monogram penny of Aelfred – would surely have been identified by Thoresby as one of Aelfred.)

APPENDIX B. Concordance of Fountaine with the Thoresby and Sharp Collections

Fountaine	Thoresby	Sharp	Uncertain	Derived ³⁴	Copied ³⁵
Alla	1 <i>Ducatus</i> , 68 2 ? 69 ³⁶ 3 ? " ³⁷				(6) 23
Alred	1 2 3 4	60 29 27 28			4 3 2
Anlaf	1 2		–		
Cuthred	1	31 52			

<i>Fountaine</i>	<i>Thoresby</i>	<i>Sharp</i>	<i>Uncertain</i>	<i>Derived</i>	<i>Copied</i>
<i>Eanred</i>	1	30			5 (3)
	2	31	(Another: 4)		8
	3	32			6
	4		5		
	5	33			7
	6			-	
<i>Eardvulf</i>	1		65		(2)
	2		63		
	3		38		
	4	48			15
	5	49			16
<i>Ethelbert</i>	1	26	(Another: 40)		1 (1)
<i>Ethelhelm</i>	1		30		
	2		58		17
<i>Ethelred</i>	1	(Another: MS 15)	24		9 (4)
	2		9		
	3	39			10
	4	40			12
	5		14		13
	6	43 ³⁸		11 (ar - sic)	11
	7	MS 28/47 ³⁶			14
<i>Osbright</i>	1	61			18 (5)
	2	(Another: 60)	?32		20
	3	(Another: 65)	74		22
	4	(Another: 63)	33		19
	5			31	21
<i>Wlfred</i>	1		51		
	2	MS 47/67 ³⁶			
<i>Incertum</i>	1			33	
	2			32	

NOTES

It is very pleasant to record thanks to Mr Owen Parsons, of Gloucester, and Mr Peter Mitchell of Messrs Baldwin, both of whom very kindly arranged for me to see the Northumbrian material in the Sharp cabinet, during my quest for die combinations absent from the Yorkshire Collections. I am grateful to them both and to Mr E.Daniels, of the Department of Photography at the University of Leeds, who later helped me with the negatives made in London.

I am indebted to Mrs S.Thomas, Archivist of the Yorkshire Archaeological Society and to Mr J.H.Brown, Librarian of Leeds Grammar School, both of whom allowed me access to Thoresby manuscripts in their care. I have received endless help from my colleagues in Leeds City Reference Library; I record my thanks to them as I do to Mrs Irene Rhodes who, on this and other occasions, has transformed manuscript into typescript for me.

1. *The Diary of Ralph Thoresby*, edited by Joseph Hunter, 2 vols. (1830), I, 306.

2. Letters of Eminent Men addressed to Ralph Thoresby, 2 vols. (1832), I, 207. The published letters include none from Archbishop Sharp about the Ripon hoard. The archives of the Yorkshire Archaeological Society, in Leeds, contain many Thoresby manuscripts, including the accession register for the collection in his museum (MS 27). Among the drafts of letters which Thoresby sent to his friends, it has not been possible to discover any which include observations on the Ripon stycas.
3. Letters to Thoresby, I, 208.
4. Bishopthorpe, York, was and is the Archbishop's palace: Nicolson had been corresponding with Dr Sharp.
5. Letters to Thoresby, I, 218-19.
6. Nicolson obviously knew the Lindisfarne Gospels, at that time still in the possession of Sir Robert Cotton's family. Folio 121, on which is transcribed the passage from St Mark's Gospel (xii, 42), recording the story of the widow's mites, has the tenth-century gloss, stycas, in relation to the Latin *minuta*. It must be noted that the words are equivalent; stycas meant no more than 'little things' and, of itself, the term had no monetary connotation.
7. Letters to Thoresby, I, 220.
8. Among the Thoresby manuscripts at Leeds Grammar School is the draft of a letter to Dr Gale, dated March 1696, in which Thoresby says he had returned 'ye Saxon Coyns found at Rippon of which I wrote you before'. His immediate labours on the hoard must have by then been over.
9. William Nicolson, Archdeacon of Carlisle from 1682 till 1702 and then Bishop there until 1718, when he was translated to Derry in Ireland, published the *Historical Library* in five parts between 1696 and 1724. Although he made an intensive historical study of the northern counties of England, of Northumberland in particular, he never managed to fulfil his long-standing intention of publishing his records of Northumberland. As a contributor to Edmund Gibson's editions of Camden's *Britannia* in 1695 and 1722 he used part, at least, of the material and, in the later edition, stated that his Northumberland manuscripts had been lodged with the Carlisle Chapter (*DNB*).
10. Letters to Thoresby, I, 244.
11. R.Thoresby, *Ducatus Leodiensis or the Topography of the Ancient and Populous Town and Parish of Leeds*, (1715). A second edition, by T.D. Whitaker, issued in 1816, has the 'Catalogue of Antiquities' as a section with separate pagination.
12. It is not clearly listed with the other stycas in the manuscript catalogue of his Saxon coin collection which was compiled in December 1709. This volume is now in the Leeds Grammar School.
13. As is acknowledged in the *Ducatus*, (1715, p.341) Thoresby's stycas from the hoard were obtained not only from Archbishop Sharp but also from Sir Roger Beckwith. His museum accession register records without date an unspecified number of them received from 'His Grace the most Reverend Dr John Sharp Lord Archbishop of Yorke'. The coins are noted as: 'EDILRED King of Northumberland and others of the small brass Saxon stycas (of whch vide Mr Archdeacon Nicolson's Letter) found at Rippon 1695'. Another entry credits 'Sr Roger Beckwith High Sherrif [of Yorkshire] - this present year 1707' with the gift of '7 of the Saxon

Brass coyns found at Alla's hil Rippon'. A note which accompanied the coins is printed in *Letters addressed to Ralph Thoresby FRS*, edited by W.T.Lancaster. *Thoresby Society*, XXI (Leeds, 1912), p.143.

14. See Appendix A, for discussion of coins perhaps found at Ripon before 1693.
15. Thoresby's MSS catalogue of 1709 quotes references to the Fountaine plate, but does not always tally with these illustrations or with his own publication; the material must have been checked and revised before 1715. The list, however, includes the comment: 'above a dozen more of these brass coins found at Rippon An° 1695, but no distinct Names that I am able to make out'.
16. See Appendix B. Of the illustrations of his coins Thoresby, in the preface to the *Ducatus* (1715, p.xv), comments: 'many of the Saxon and Danish Coins are well engraved in the last Edition of the *Britannia*... but best of all in Sir Andrew Fountain's *Numismata*, which is the most correct and judicious of any relating to those Times'.

The styca illustrations which were made specially for the 1705 work are, in contrast to those borrowed from Camden, 1695, so little stylized that it is now possible to recognize the dies from which many of the coins were struck. Indeed, until the specimen can be traced in a modern collection, the present writer is prepared to accept one of the Thoresby coins (47) as a missing-link between two otherwise separate groups in the Yorkshire Museum's cabinet.

17. *Ducatus* (1715), p.343. The site (a natural mound?) has never been excavated; it is now covered with trees and undergrowth which would make investigation difficult.
18. The purchase of the collection built up by Thomas, Lord Fairfax, is recorded briefly in the *Ducatus* (1715, p.495). Only in one instance, however, does Thoresby acknowledge the Fairfax pedigree for an Anglo-Saxon coin; this is in the discussion of a penny of Edward the Confessor (*Ducatus*, 1715, p.348, no.107).

In view of the fact that the Fairfax family had strong connections with York and with Bolton Percy, one might have expected that cabinet to be full of early Northumbrian coins. It is perhaps not impossible that the sceat of Eadberht (*Ducatus*, 1715, p.341, no.25) was in the collection when it was bought by John Thoresby (see Appendix A).

19. A comment on the sale appears in *Archaeological Journal*, 3 (1846), 73. A marked copy of the original sale-catalogue, now preserved in the Bodleian Library, Oxford, has been published by S.Piggott, *Sale Catalogues of Libraries of Eminent Persons*, 10: *Antiquaries* (1974), p.181. The auction was held by Whiston Bristow, Charing Cross, London, on 5-7 March 1764. The Northumbrian coins came up as six lots (140-45) on the second day and were bought by White (140), Sn[elling] (141-24), Barclay (143) and Brander (144-45).

Snelling (see *DNB*) is known to have supplied William Hunter with coins; White did also. Comparison of Fountaine, Plate X, with the Hunter stycas now suggests that three of the coins came from Thoresby's 1695 Ripon parcel: SCBI Glasgow I, 151 (= Th.32), 181 (= Th.39) and 277 (= Th.40).

If Tyssen was a client of White, it can also be suggested that the Thoresby sceat (Th.25) and his odd styca of Edelretrt/Vbroder (Th.26) are now in the British Museum as *BMC Northumbria* 5 and 281 (for the

Tyssen pedigree, see R.H.M.Dolley and J.S.Strudwick, 'The Provenances of the Anglo-Saxon Coins Recorded in the Two Volumes of the British Museum Catalogue', *BNJ* 28 (1955-56), 26-59.

William Eyre, whose cabinet is now the Winchester component of the collection in the University of Leeds, died in 1764. The three stycas in his collection have been checked against the Fountaine plate; although one, of Eanred/Fordred, may be from the same dies as Thoresby's (Th.32), it is almost certainly not the latter's specimen.

It might perhaps be said that although the presence of stycas in the Cotton collection reflects discovery long before 1695, so that items from other sources were available, the Ripon hoard of 1695 may have contributed considerably to eighteenth-century coin collections.

20. The immediate reference is the Introduction to the Sharp sale catalogue, 1977.
21. Thoresby's MSS notes (in Leeds Grammar School) for his coins in the 1722 edition of the *Britannia* refer to the stycas as follows: 'a considerable Number of which were found near Rippon An° 1695'.
22. See Appendix B.
23. *DNB* (Sharp) and A.Tindal Hart, *The Life and Times of John Sharp, Archbishop of York* (1949), 308. The assumption must have been based on a misunderstanding: gifts of some coins during his life-time and perhaps of some also by bequest did not imply the entire collection becoming Thoresby's property. Here, it can be admitted that the present writer has not checked some Thoresby papers which Tindal Hart (p.340) records briefly in the Sharp archive, but Mr Parsons gives the assurance that they contain nothing relevant to the coinage of Northumbria.
24. The Continental coins were sold at Sotheby's on 14 March 1966; numismatic books from the Sharp library were auctioned by the same firm on 21 May 1969. English coins and medals (Charles I - Anne) and Colonial coins were auctioned at Glendining's on 5 October 1977.
25. Sir Andrew Fountaine, *Numismata Anglo-Saxonia et Anglo-Danica Breviter Illustrata* (1705).
26. E.Pirie, 'Early Northumbrian Coins at Auction, 1981', *BNJ* 51 (1981), pp.32-51.
27. Attention must be drawn to the Ripon hoard of 1846, also from Ailcey Hill, D.M.Metcalf, 'Some Finds of Medieval Coins from Scotland and the North of England', *BNJ* 30 (1960), no.43; J.R.Walbran, *A Guide to Ripon, Fountains Abbey etc.*, eleventh edition, revised by Canon Raine and W.F.Stephenson (1874), p.7. Walbran (pp.23-24), cited by MacKay (p.76), records, too, what must be stray finds of stycas from an area north of the hill. No exact date of discovery is recorded, although one may assume them to have come to light in the late 1860s or early 1870s (the reference does not appear in earlier editions of his guide). The site is thought to have been that of the ninth-century 'Scots Monastery', but the coins can hardly be termed site-finds since there is no excavation context for them.

It must also be recorded that in the publications of the Surtees Society, 80 (1885), p.361, a footnote tells of stycas having been found on Ripon Common by Sir Edward Blacket. No certain date can be assigned to this last discovery; three men, each Sir Edward Blacket, were in turn owners

of the Newby Hall estate, Ripon, from 1670. Had these coins been found before 1695, or even before 1715, one would have thought Thoresby himself would have been more specific in relating the first hoard from Ailcey Hill to the discovery of similar coins in the Ripon area.

28. Hunter, in editing Ralph's *Diary* records some bitterness (I, 152) roused by lack of any acknowledgement to the Thoresbys whose coins were not distinguished from those lent for the occasion by the antiquary Dr Nathaniel Johnston, of Pontefract.
29. Since there were many specimens in the whole gift, (including Roman from Aldborough) they were not listed individually. The very fact that Thoresby does not use the term *styca* or relate Ripon coins, even pennies, to the find of 1695 indicates that the gift must have been received before the hoard was discovered.
30. The acquisition details of his single *sceat* have not been traced in Thoresby's museum register (which seems to be only of donations and not also of purchases).
31. R.H.M. Dolley and J.S. Strudwick, 'An Early Seventeenth Century Collection of Anglo-Saxon Coins', *BNJ* 27 (1952-54), 309.
32. Dolley and Strudwick, 'An Early Seventeenth Century Collection', p.311.
33. It is perhaps worth commenting that early cleaning efforts might have left the *stycas* with a somewhat grey appearance, so that copper was mistaken for silver. Although some specimens in the Sharp collection have been well cleaned and are as crisp as when they were new, one or two others have been only partially cleaned and can now only be described as looking grey.
34. Derived: Camden's *Britannia* (1695), *Tabula V*.
35. Copied: by Gibson in the 1722 edition of Camden's *Britannia*, *Tabula V*; text by Thoresby on pp.ccii, f. The items in brackets are those which appear in Richard Gough's 1806 edition: text on p.clxxxvi.
36. The Fountaine reference is not cited in the *Ducatus*.
37. Not listed in the *Ducatus*.
38. Not from the 1695 hoard.

PLATE 1

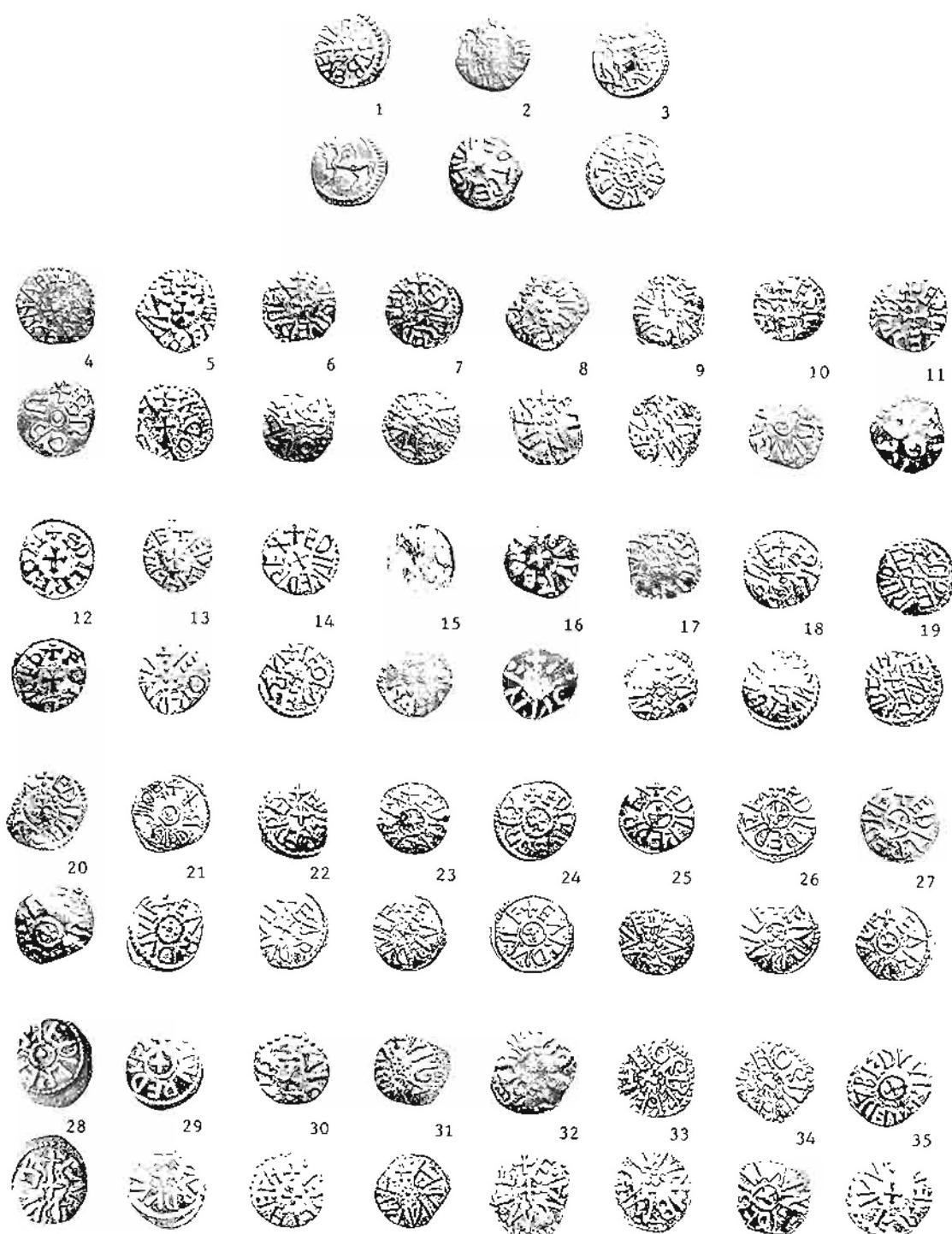
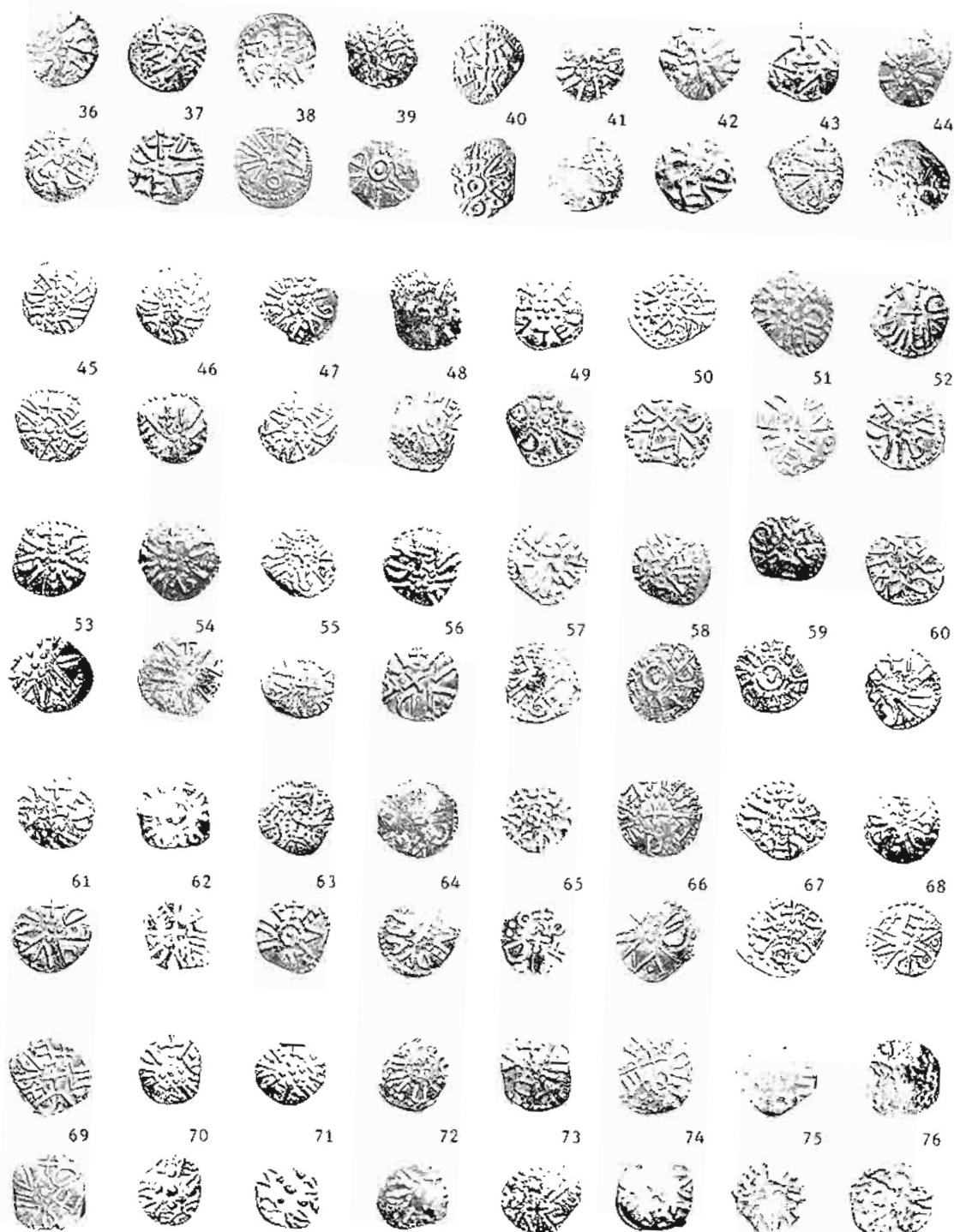


PLATE 2



THE COINS OF QUENTOVIC FROM THE CUERDALE HOARD
IN THE MUSEUM OF BOULOGNE-SUR-MER

M.Dhénin and P.Leclercq

The hoard from Cuerdale (near Preston, Lancashire), discovered on 15 May 1840, has already been the subject of many publications. Nevertheless, our knowledge of it is still not fully complete. Claimed as 'treasure trove', that is Crown property, the major part of the hoard was handed over to the chancellor and council of the duchy of Lancaster. The latter, intending to act in the best interests of science and archaeology, an attitude much applauded at the time, dispersed the hoard amongst various British institutions (at London, Cambridge, Oxford, Glasgow, etc.) and abroad, particularly in France, as well as to several private collectors of different nationalities. If those groups of some importance conserved in national collections are well known, others remain to be discovered, in Britain perhaps and certainly in France. In France provincial collections, often deregistered in order to hide them during the Second World War, are gradually resurfacing, dependent on the efforts of those responsible for their preservation and the work of local volunteers. Thus, just across the Channel, at Boulogne-sur-Mer, M. Pierre Leclercq has undertaken the task of reclassifying the coins and has been encouraged in this by the museum's conservateur, M. Claude Seillier. In the preliminary studies he came across a certain number of coins which were part of the Cuerdale hoard, as shown by the minutes of the meeting of 10 December 1842: 'M. Le Chancelier du Duché de Lancastre envoie pour le Museum de Boulogne 6 pièces de monnaie de Charles le Chauve et 36 pièces de monnaie de Cunetti qui ont été trouvées dans l'année 1840 à Cuerdale dans le Lancashire'. Twenty-two of these coins have been rediscovered, in two groups wrapped up in a single sheet of paper. Mr Peter Seaby examined these two groups in 1980, and concurred with our opinion that they belonged together, and thus that the provenance of the six Carolingian coins was sure: they are those extracted from the Cuerdale hoard to be given to the Boulogne Museum. It is these with which we are particularly concerned: the coins of Cnut/Cunetti and Cnufredus rediscovered are:¹

Type IId	2	NC 5, Pl.9, 118
IIe	13	Pl.9, 115
IIIId	1	Pl.8, 104

We hope to find the twenty missing coins and to give later the full list of the coins from the Cuerdale hoard now in the Boulogne Museum.

No doubt as a result of deliberate choice by the duchy authorities, the six Carolingian coins in question were all struck at Quentovic. The very fact that the Boulogne Museum has retained six coins from Quentovic is interesting in itself; the various inventories of the Cuerdale hoard which have been published are based on that of Edward Hawkins² and only include

a single denier of Quentovic, type GDR, weighing 1.18 g. We should note, however, an exception recorded by Dolley and Morrison; they, in addition to the denier conserved in the British Museum, give the following description: 'Gariel xlii,54 variety but obolus, Morrison and Grunthal 1372, Charles the Simple, Quentovic, 1, illustrated NC 1843'.³ In fact, the reference to Gariel⁴ corresponds to no.1371 of Morrison and Grunthal⁵ and not to no.1372; the latter corresponds to an obole of Melle conserved in the British Museum (no. 249 in the catalogue⁶) and provenanced in fact from the Cuerdale hoard. There is some confusion and this obole of Melle has been given an erroneous reference to Gariel and hence a wrong mint. Furthermore, we find this same confusion in Morrison and Grunthal, p.375: 'Charles the Simple, Quentovic (1372) 1'. This obvious error (one seeks in vain for this obole of Melle in the two inventories) is nevertheless, in a certain sense, premonitory.

We must describe in some detail the Quentovic coins in the Boulogne Museum:

1. +GRATIA D-I REX, carolingian monogram, KRLS, chevron in centre.
+QVVENTOVVICI, cross pattee with a pellet in 2nd and 3rd quarters.
Denier, 1.74 g, Gariel xxxii, 187; M & G 716.
2. +GRATIA D-I REX, carolingian monogram, HRLS, pellet in centre.
+QVVENTOVVICI, cross pattee with a pellet in 2nd and 3rd quarters.
Denier, 1.665 g, Gariel xxxii, 187; M & G 716.
3. +CRVTIV D-I REX, carolingian monogram KRLS, nothing in centre.
QVENTOVVICI, cross pattee.
Obole, 0.45 g, Gariel xxxii, 190; M & G 720.
4. +CARLVS REX FR (S horizontal), carolingian monogram CRLS, inverted chevron in centre.
+QVANTOVVICO (Q and O with pellet in centre, C square), cross with two pellets at end of each arm.
Denier, 1.34 g, Gariel xlii, 54; Poey d'Avant⁷ cliii, 12; M & G 1371.
5. +CARLVS REX FR (S horizontal), carolingian monogram CRLS, inverted chevron in centre.
+QVANTOVVICO (Q and O with pellet in centre, C square), cross with two pellets at end of each arm.
Denier, 1.31 g, Gariel xlii, 54, Poey d'Avant cliii, 12; M & G 1371.
6. +CRATIA D-RIE+, carolingian monogram HRLS, nothing in centre?
+QVVENTOVVICI, cross pattee with a pellet in 2nd and 3rd quarters.
Denier, 1.35 g, Gariel -; M & G -.

The deniers 1 and 2, and the obole 3, are of a type called GDR by M. Jean Lafaurie, introduced shortly after the edict of Pitres (864) and characterised by the obverse legend GRATIA DEI REX.⁸ The coins of Quentovic almost always bear a cross pattee with two pellets, a peculiarity which is only found sporadically at Thérouanne, Cassel, Amiens, and Visé, as well as at Troyes, Bar-sur-Aube, and Vendeuvre. These places are grouped into two distinct geographical zones, both of them fairly small. Do the pellets constitute a difference having a numismatic significance, or do we have the simple copying of the type of a main mint by the others? It is curious to note that at Quentovic certain coins do not carry the pellets; for example, the obole from the Cuerdale hoard in the Boulogne Museum, where the light weight and defective legend lead one to place it at a date later than that of the two deniers. Coins of Quentovic of this type have been found in numerous hoards belonging to the end of the ninth century, in particular in fair quantity from the hoards of Glisy, Ablaincourt, Féchain, Compiègne, Assebroek, and Chalo-Saint-Mars.

The two deniers 4 and 5 belong to a rare type: Morrison and Grunthal record one specimen at Brussels and one at Paris (acquired in 1849 from the

Rousseau collection). In fact the Brussels example (Inv. 27) is not of this type, but of a similar one (Poey d'Avant, cliii,9); we are grateful to M. Van Keymeulen for this information. Gariel gives an engraving of a specimen which is none other than that of the French Cabinet, although he does not indicate its location, contrary to Poey d'Avant who also describes it. A further example figured in the Meyer collection (no.352, not illustrated). This rarity is not just an apparent one; the coins that we have been able to see, the two from Boulogne and that in Paris, come from the same pair of dies and have the same die-axes. Even if the dies exhibit signs of wear on some coins, it is certain that the issues cannot have been abundant. This rarity, the peculiar character of the epigraphy, and the typology itself have contributed to the hesitation over classification that one can sense; Gariel attributes the type to Charles the Fat, Prou⁹ to Charlemagne, Morrison and Grunthal to Charles the Simple, coming back to the former attribution of the Cabinet at Paris still recorded on its ticket. Such attributions have not, in any case, always been justified. Gariel, in fact, follows Longpérier (Catalogue of the Rousseau collection, 1847, p.196) who explains his attribution as follows: 'In order to class these two coins under Charles the Fat, I base myself on the relationship of their style with that of the deniers discovered at Cuerdale..., which carry the name of a Danish sea-king'. It is indeed an odd coincidence, and Longpérier probably would have considered his attribution as assured by the presence of this very type in the Cuerdale hoard. Prou classes this denier to the second period of the reign of Charlemagne (781-800) perhaps because of the titulature CARLVS REX FR and also because the name of the town is not apparently followed by a determinant (civitas, portus...). In reality this determinant is 'vicus', contained in the very name Quentovic. Clearly the spelling QVANTOVVICO with an A is unusual and may pass as an archaism. We have only found four deniers that resemble it:

+CARLVS REX FR, carolingian monogram CRLS.

+QVANTOVVICO (C square), cross.

Poey d'Avant cliii,10.

+CARLVS REX FR, carolingian monogram CRLS.

+QVANTOVVICO (C square), cross with four pellets.

Poey d'Avant cliii,9.

+CARLVS REX FR, carolingian monogram KRLS, pellet in centre.

+QVANTOVVIC (C square), cross.

BN 1965-1100, 1.55 g.

+CARLVS R[EX FR], carolingian monogram KRLS inverted, inverted chevron in centre.

+[QVA]NTVVICO (C square), cross with two pellets at end of each arm.

Poey d'Avant cliii,11.

It seems certain that these types are nearly contemporary. The presence of one of them in the Cuerdale hoard permits one to set aside the attribution to Charlemagne; it would be by many years the oldest coin in the hoard. The types find no place in the coinage of Charles the Bald of whom we know the major issues, which are on average much heavier. There remain the possibilities of Charles the Fat or Charles the Simple, between whom it is difficult to choose. The possibility of their being imitations struck in Britain has been suggested to us by Mme F.Dumas and Professor P.Grierson.

The denier 6 is of the same type as deniers 1 and 2. In particular we may note the transposition of letters in the legend: D-RIEX for D-I REX. It is, however, different from them, both to the eye and to the touch; its diameter is larger, 22 mm compared with 20/21 mm, and the style of the engraving is completely different: the monogram, the cross, and the letters are large, flat, without relief. These characteristics and the light weight

prompt one to place it distinctly after the reign of Charles the Bald. It can be compared with two examples in the Paris Cabinet (Prou 199 and 200) which weigh 1.38 g and 1.25 g. Mme Françoise Dumas points out their similarities with several deniers in the British Museum (nos 303, 307, 308) of which the weights are not useful (broken flans) but which derive from the Inchkenneth hoard. She places the manufacture of all these pieces towards the middle of the tenth century, earlier than those present in the Fécamp hoard.¹⁰ In fact, the denier from Cuerdale and the two cited from the Paris Cabinet differ slightly from the pieces in the British Museum by style and details of execution which show their earlier date; in particular the initial cross is a cross pattee, while on the Inchkenneth coins it is formed of four triangles. In the Cuerdale hoard, as in the one from St Denis, they lie alongside deniers from Arras with the legend ATREBAS CIVI with the same flat style, which are found equally in the Assebroek hoard dated to the reign of Charles the Simple. Thus it is to this reign that we should attribute these Quentovic deniers.

The discovery of the Carolingian coins from the Cuerdale hoard in the Boulogne Museum does not modify fundamentally our view of the hoard. On the contrary it is a vital source for our understanding of the coinage of Quentovic at the turn of the ninth and tenth centuries.

NOTES

1. E. Hawkins, 'An Account of Coins and Treasure found in Cuerdale', *NC* 5 (1842-43), 1-48, 53-104. See also *NC* 1964, pp.218-82.
2. Hawkins, p.58 no.39, Pl.6 no.76.
3. R.H.M.Dolley and K.F.Morrison, 'Finds of Carolingian Coins from Great Britain and Ireland', *BNJ* 32 (1963), 75-87.
4. E.Gariel, *Les monnaies royales de France sous la race carolingienne*, 2 vols (Strasbourg, 1883-84).
5. K.F.Morrison and H.Grunthal, *Carolingian Coinage* (NNM 158, New York, 1967).
6. R.H.M.Dolley and K.F.Morrison, *The Carolingian Coins in the British Museum* (London, 1966).
7. F.Poey d'Avant, *Monnaies féodales de France*, 3 vols (Paris, 1858).
8. J.Lafaurie, 'Deux trésors monétaires carolingiens', *RN* 6th series 7 (1965), 262-305.
9. M.Prou, *Les monnaies carolingiennes* (Paris, 1896).
10. F.Dumas-Dubourg, *Le trésor de Fécamp et le monnayage en France Occidentale pendant la seconde moitié du Xe siècle* (Paris, 1971).



THE ANONYMOUS ANGLO-VIKING ISSUE
WITH SWORD AND HAMMER TYPES
AND THE COINAGE OF SITRIC I

Ian Stewart

Five coins are known of an early-tenth-century type from the Danelaw which has on one side a sword and on the other a hammer, each surrounded by an inarticulate inscription. Two of the hoards in which coins of this type have been found also contained a specimen of the extremely rare coinage in the name of Sitric I. A detailed listing of Sitric's coins was published by Professor Michael Dolley and Mr C.N. Moore in 1973,¹ together with an extensive bibliography, but although there have been many references to the anonymous type it has not previously been the subject of a study in its own right. Part 1 of this paper therefore deals with the attribution of the anonymous type, while some further consideration that now seems necessary of the coinage of Sitric and its relationship to the other Viking coinages of the period is contained in part 2.

1. *The Anonymous (CS) Type*

In apparent order of discovery the five specimens (illustrated) of this type are:

1. Blunt collection, ex Glasnevin hoard.²
2. Fragment from the Bangor hoard.³
3. Stewart collection, ex Grantley 958b, fragment found near Cambridge.
4. British Museum, from the Morley St Peter hoard.⁴
5. Fragment from Dunmore Cave.⁵

All four hoards in which coins of this type have been present were buried in the 920s and contained other Viking coins with the sword or hammer type, or both. On the St Peter, St Martin and Sitric coins the sword is placed horizontally between a two-line inscription, and this is the only type to depict a small sword contained within a circle and inscription. It may therefore be termed the circumscription-sword type (CS). The hammer on the other side of the CS type may be compared with that on some of the coins of Regnald, St Peter and Sitric.

That the CS type was not included in the standard works on English coinage before J.J. North's *English Hammered Coinage* (1963) is probably in large part due to the fact that there was no example of it in the British Museum before the discovery of the Morley St Peter hoard in 1958. Lindsay had described the Glasnevin specimen as a St Peter,⁶ but Haigh saw it as a connecting link between the coinages of Regnald and Sitric.⁷ Otherwise

the CS type does not seem to have attracted much attention until 1954 when Mr Blunt published the small find from Bangor in North Wales that had lain in the local museum little noticed by numismatists since its discovery in 1894.

Various opinions have been expressed in recent years about the coins of this type. In 1954 it was still not generally recognised that the St Peter coinage of York belonged to the first quarter of the tenth century⁸ and Mr Blunt had remarked of the Bangor specimen that it constituted a new type for the Viking coinage and might have 'preceded the introduction of the St Peter's issue'. The Morley St Peter specimen was noted by Professor Dolley as being 'a rarity of the very highest order, a secular coin of York struck it would seem immediately before the advent of the Hiberno-Norse invaders, and probably c.915'.⁹ In a summary listing of the hoard¹⁰ he recorded it as a late type of the Raenalt coinage and in this he was followed by North, who listed the type (no.533) under Raenalt, c.910. In 1965 Dolley described it as an 'extremely rare transitional type...struck at York c.920'.¹¹ This view, restated by Dolley on a number of occasions, has been followed by some of those who have written more recently such as Dr Smyth in 1979¹² and Miss Archibald in 1980.¹³ Describing the Dunmore specimen in 1973 as a 'penny of the York Vikings', Dolley wrote of the coins of this type that it was 'problematical whether they are to be dated just before or just after the year 920'. In 1978¹⁴ he suggested associating the type (as Grantley had done on his ticket) with Regnald's reign at York in 919-21, although the joint paper on the coinage of Sitric which he had published with Mr C.N. Moore in 1973 had observed 'the assumption that York is the mint is one that may have been made too lightly'.¹⁵ In SCBI *East Anglia* the Morley St Peter coin (no.39) was listed under 'Coinage of York, c.920-5, Early Secular Issue'.

Most of the inscriptions on these coins are unintelligible but on no.4 that on the sword side is apparently copied from EADVVEARD REX as on the English coinage of Edward the Elder. Although such an explanation was considered and rejected by Dr Smyth, Miss Archibald thought this inscription might 'imply a recognition of Edward's authority at York', speculating on the possibility that examples of the type with proper Edwardian inscriptions might await discovery and observing that 'a suitable occasion for such an issue would have arisen following the recognition of Edward's overlordship by Regnald of York and others in 920'.

In attempting to find a place for the CS coins in the Viking series we have useful evidence in their types and provenances. The earliest occurrence of this form of the hammer, presumably Thor's hammer, in the Anglo-Viking coinage is apparently on the obverse of the last of the three types that may be attributed to Regnald I of York.¹⁶ It also occurs on a few of the St Peter coins with sword and on some of the coins of Sitric that are probably copied from the St Peters. All these types seem to belong to the early or middle years of the 920s.¹⁷ This period of issue for the CS type is confirmed by the four hoards in which examples of it have been found - Glasnevin (near Dublin), Bangor (Caernarvonshire), Morley St Peter (near Norwich) and Dunmore (near Kilkenny). None of these can have been buried earlier than 920 and probably none later than 930. Athelstan's recovery of York in 927 was celebrated on his coinage by the use of the title *Rex Totius Britanniae* and it is unlikely that Viking coinage would have taken place in Northumbria or elsewhere in the Danelaw after that date.¹⁸

The absence of the CS type from the Bossall hoard is remarkable in view of its representation by a single specimen in each of the four other relevant hoards of the 920s that contain examples of the sword coinages. Most of

the total of some two hundred and seventy coins from Bossall were St Peters, but there were also probably about twenty (the great majority of the surviving specimens) of the three types of Regnald I of York, which were struck around 920 and carry an unmistakable, albeit often blundered, version of the York mint signature. There were a few other coins in the Bossall hoard, including English coins of Alfred, Edward and Athelstan and Kufic dirhams, but the preponderance of York coins of the first quarter of the tenth century was overwhelming. Since Bossall lies only about seven miles from York, on the road to Malton, this is not surprising. But it raises very substantial doubts about whether the CS type can have been struck in the same city as the coinages in the names of St Peter and Regnald.

It was suggested in 1967 that the St Martin coins of Lincoln, a sword type copied from the sword St Peters, had been struck in the 920s and not, as had previously been supposed, in or before 918 when Edward had apparently advanced the English boundary to the Humber.¹⁹ This conclusion, based on the concentration of the sword types in the hoards of the 920s, was supported by the occurrence of a fragmentary St Martin in the Dunmore Cave find of 1973. If correct, it must mean that at least one Viking coinage took place south of the Humber after 918, even though there is no evidence in the written records to indicate the exercise of Viking rule in eastern Mercia in the last years of Edward or the earliest of Athelstan. This therefore opens the possibility that other Viking coinages of the 920s may also have been struck in the same region.

The accompanying table shows the composition of the pre-sword find from Geashill, County Offaly (the only known hoard apart from Bossall to have included a coin of Regnald I) and of the five hoards of the 920s that contained examples of the Viking sword coinages. The strong representation

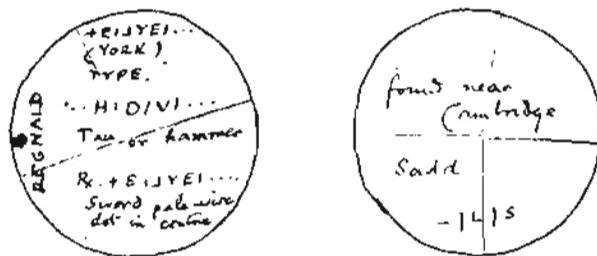
HOARDS CONTAINING COINS OF REGNALD I OF YORK
AND OF THE SWORD TYPES OF THE 920s

	Morley					
	Geashill	Bangor	St Peter	Glasnevin	Bossall*	Dunmore
ENGLISH						
Pre-899	-	-	81	-	1	-
Edward, 899-924	-	3	763	-	5	2
Athelstan, 924-39	-	-	1	2	2	1
VIKING						
Earlier issues	-	-	24	-	3	-
St Peter swordless	3	2	13	-	13	-
Regnald, c.919-21	1	-	-	-	12	-
St Peter, with sword	-	1	1	2	12	2
Sitric, d.927	-	1	-	1	-	-
St Martin	-	-	-	-	-	1
CS type	-	1	1	1	-	1
Islamic and other	1	5	-	2	2	2
Total	5	13	884	8	c.270	9
	-	-	-	-	-	-

* Note: The numbers of coins recorded for the various rulers or issues in the Bossall hoard are based on samples that can be associated with the find; the totals for most of the categories would have been much higher. See Blunt and Stewart, *NC* forthcoming.

of coins of Regnald in Bossall contrasts with their absence from the other four sword hoards of the same period. Conversely, none of the recorded specimens of the coinage of St Martin or Sitric is known to derive from the Bossall hoard but three of the other four sword hoards contained a specimen of one or other of them. As with the CS type, therefore, there is an apparently significant contrast in distribution between the York coinage of Regnald and the coins of St Martin and Sitric, both of which are derived in type from the sword St Peter coinage of York. Doubts have been expressed by Allen and subsequent writers about attributing all the coins of Sitric to York, and this question is further considered in the second part of this paper.

Despite the lack of reference in the historical sources to control by the Vikings of areas to the south of the Humber at this period, the St Martin coins certainly and the Sitric coins probably point to such a situation. It is against this background that the origin of the CS type should be considered. Its absence from the Bossall hoard is more certain than in the case of the Sitric and St Martin coinages, since the provenances of the five recorded specimens, most fortunately and unusually for an issue of this period, are all known. While the four hoards cannot of themselves locate it, the presence of a CS coin but not a Sitric or a St Martin in Morley St Peter may be indicative, especially since the only specimen without a hoard context was probably found in Cambridgeshire, also well to the south. As can be seen from the verso of Lord Grantley's ticket, he acquired this coin (no.3) from Sadd, the Cambridge coin dealer, who presumably supplied the information that it was a local find. Like most collectors, Grantley was capable of error in recording provenance,²⁰ but there is no reason to doubt a find-spot in the vicinity of Cambridge (where one of the Danish armies of the early tenth century was centred) for an Anglo-Viking coin of the 920s; and Sadd would not have had to invent it in order to sell such a coin to Lord Grantley, who had no other specimen of the type.²¹



Ticket accompanying Grantley lot 958b

The evidence therefore seems to point to the CS type having been struck not in Northumbria but in the east midlands, where imitation of an inscription in Edward's name would be natural. If not attributed to York, the CS type no longer complicates the arrangement of the Northumbrian series, and the same appears to be true of the coins in Sitric's name, strange though it may seem that his coinage was not struck at the capital of his Northumbrian kingdom. But this is certainly more compatible with the numismatic character of the York series itself between the burial of the Cuerdale hoard (c.905) and 927 which, apart from the three types of Regnald, seems to have consisted entirely of coins with the name of St Peter, without sword before Regnald's coinage and with sword after. While Thor's hammer, the other main type on the Anglo-Viking coinages struck between the death of Regnald

and 927, was omitted from some of the coins of Sitric, the sword is common to all the issues and must have been a device of significance for the Norse rulers of this period.²²

2. The Coinage of Sitric I

Dolley and Moore listed nine coins with the name of Sitric. All have a horizontal sword on the obverse, but there are three different types of reverse: A, a T-hammer; B, a hammer in the shape of a mallet with a triangular or pentagonal head; and C, a cross with two pellets and two crescents in the quarters. All these reverse designs, like the sword obverse, were also used on the late St Peter coinage and there can be little doubt that the Sitric coins are copied from the sword St Peters. Evidence that this was the case can be found in type C, where only one of the three known coins (no.7) reproduces the small, inverted, mallet-shaped hammer on the obverse from the sword St Peters of the cross type (on which the shaft of the mallet serves as the letter I in PETRI).

The three coins of type A all have literate inscriptions, SITR/ICRE(X) on the obverse and the names of moneyers on the reverse, Adel—d (no.3), Are (no.1) and Sibrant (no.2).

The three coins of type B described by Dolley and Moore all have garbled inscriptions on one side or both. The only clear reading is that on the obverse of no.4 which is as on type A except that the R of REX is inverted. Nos.5 and 6 lack the S and have REX blundered. The reverses of nos.4 and 5 have readings consisting of letters A,E,I,N,O and V, but that on no.6, IIEVICRIMOT, seems to hint at a moneyer's name (? Levicr) with the word MOT. Two other coins (here nos.10 and 11, to continue Dolley and Moore's numbering) may be considered along with these. No.10, from the York Coppergate excavation of 1980,²³ has a single-shafted mallet with a trefoil of pellets each side, as on no.4, and a not entirely dissimilar reading, IIEBIALIOEIX. But its lettering has more in common with nos.5 and 6, to which it seems to be closely related. The obverse reads partly retrograde and upside down, XICIOR/SITEI. No.11 (*SCBI Edinburgh* 71) was mentioned but not listed by Dolley and Moore in view of its obverse inscription which, if read retrograde and backwards from bottom right to top left (EDIIV/IDIED), seems to suggest the name Edmund more than Sitric, although there may be no significance in this. The reverse of no.11, with the T-hammer, is much more literate, reading HANA MO.T., and presumably indicating a moneyer Mana. Apart from this coin, the only reverse dies with the T-hammer and moneyer's name belong to Sitric's type A, which suggests a connection between them.

One of the coins of type C, no.7, also has a moneyer's name with Mot - ERIC MOTI. Its obverse has the enigmatic inscription LVDO/SITRC, with the inverted mallet. The other two (nos.8-9), without the mallet, both read SITR/ICREX, and are from the same reverse die. It has the retrograde inscription CASTDAEQ(?)RT.

When and where the coins of Sitric were struck are questions that pose considerable difficulties. Apart from the historical circumstance there is nothing to associate them with York. In type and detail they seem to copy the St Peters, not to progress alongside them. If both had been minted concurrently in the Northumbrian capital it would be surprising to find the relatively plentiful St Peters (whether struck under civic or ecclesiastical authority) outnumbering so significantly the extremely rare coins of comparable design in the king's own name. Could the coins of Sitric then have replaced the sword St Peter coinage at York, say in 925 or 926? In theory

this is a possibility, and it might be used as an argument for explaining the absence of Sitric's coins (like the CS type) from the Bossall hoard. But, even if Birchall's church type York coin of Athelstan²⁴ is assumed not to have come from Bossall (if it did, then a date for Bossall earlier than 927 is ruled out), the structure of the contents of the Bossall hoard does not suggest a date of burial significantly earlier than Bangor, Morley St Peter or Glasnevin, each of which contained a specimen of the CS type and two of them a coin of Sitric also. Furthermore, the York coins in a hoard lost so near their mint would be expected to run, if anything, later than in hoards of equivalent date from Wales, East Anglia or Ireland. If there were numismatic links between the coins of Sitric and the known coinage of York in the 920s (apart from the somewhat inaccurate copying of types, which in the nature of things is more likely to have taken place elsewhere), the idea that the last pre-927 Viking coinage of York might have been in Sitric's name would need serious consideration. But such clues as there are point elsewhere.

In considering provenance a distinction should perhaps be drawn between those coins of Sitric with entirely orthodox readings and those with degenerate inscriptions which are not necessarily official issues. Regular coins of Sitric are only known from the Bangor (no.3) and Glasnevin (no.7 and ? no.1) hoards, although single finds are recorded from Threkeingham in Lincolnshire (no.4) and a grave at Birka in Sweden (no.2). Another (no.9) first appeared in an Italian collection.²⁵ Two specimens of the irregular group (nos.6 and 10) were in the 1891 hoard from Trotternish on the Isle of Skye and there is the single find from York (no.10). Except for the apparent absence of Sitric's coins from Bossall - to which, as Dolley and Moore point out,²⁶ their omission from the works of Ruding (1840) and Hawkins (1841) bears testimony - this distribution offers little guidance to their origin.

Allen²⁷ drew attention to the use by Are and Eric on nos.1 and 7, as well as on coins struck for the English kings, of forms of the letters A and M that also occur on the St Martin coins of Lincoln. He therefore suggested that Lincoln could have been the mint of Sitric's coins. Dolley and Moore wondered whether Sitric's dies were made at Lincoln, but some of them were used at York. They also accepted that the reverse inscription of nos.8 and 9 represents a mint-signature, and the consequent possibility that a third mint might have worked for Sitric.

These points may be taken further. Although Dolley and Moore reject the suggestion, there can be little doubt that the first element of the reading on nos.8 and 9, lacking only a wedge after D to provide the tail of R, is *Castra* (or perhaps *Castrae*).²⁸ The third letter has the lower curve of S disappearing into the grained circle, and it is clearly not a C. The last three or four letters presumably constitute a place-name, and one other than the Civitas of York. If not represented by a modern name like Caistor or Castor, it is difficult to guess its identity, especially as the letter after E could be either Q or G, or even perhaps O, and readings such as EORT, GRT, QRT etc. are amongst the possibilities. The mint of these coins is likely to have been to the south of the Humber, since York apparently had a monopoly of coinage in Northumbria before the Conquest. The Cuerdale coins of earl Sitric from Shelford are evidence that the Vikings did not only coin at great places. The *Castra* coins need not therefore have been struck at one of the major centres. Type A, with three different moneyers on three coins (no.11 would make a fourth), seems unlikely to be a coinage of York where before Edgar's reform the number of moneyers was generally very limited. Indeed there was often apparently a single or dominant master-

moneyer, like Regnald under Athelstan. A coinage in the name of several moneyers for Sitric at York would thus be at odds with the pattern at this mint not long afterwards, and the point is reinforced by the Southumbrian associations of the actual names found. Are, Eric and Mana are all names found in the NE I series of Athelstan-Edmund which is likely to have been centred in the north-east midlands, and Are uses a Lincoln mint signature on coins of Eadred with the crowned bust type.²⁹

The evidence of Sitric's moneyers therefore points not to York but to north-east Mercia, with Lincoln itself a serious candidate for some of the coins.³⁰ The St Martin coinage shows that a mint at Lincoln was active at some point during Sitric's reign and if he put his own name on its issues it seems more likely that his autonomous coinage would have replaced the St Martins than have given way to them (they do not have the appearance of parallel issues). This would mean a date relatively late in his reign for Sitric's coinage which in any case appears to have been too limited to have been struck over a period of five or six years.

Little is known in detail of Sitric's career.³¹ He raided Davenport in Cheshire in 920 (?) and Smyth argues that his departure from Dublin in that year was occasioned by news of the death of Regnald. He is assumed then to have succeeded to Regnald's kingdom of Northumbria, but nothing is recorded of his reign until, having 'scoffed at the power of preceding kings', he met Athelstan at Tamworth in January 926. This meeting resulted, amongst other things, in the baptism of Sitric and his marriage to Athelstan's sister Eadgyth. We do not know whether Sitric's coinage dates from the early 920s, from after the death of Edward the Elder, with whom he never came to terms, or from the time of his acceptance by Athelstan. The word LVDO on the obverse of no.7 was thought by Allen to be a title, but other interpretations are possible. Theoretically it could indicate a mint, but the position on the coin is against this.³² Miss Archibald has made the attractive but unverifiable suggestion that it could represent the baptismal name Ludovicus,³³ reminiscent of the Christian name Athelstan in which the Danish king Guthrum had coined in the time of Alfred. Sitric soon renounced both his new wife and his Christianity; and he was dead before the summer of 927 when Athelstan drove out his successors from York and concluded a peace at Eamont, near Penrith, with various northern rulers. A possible occasion for Sitric's coinage would be the period immediately after his treaty with Athelstan, in 926, when an issue in his own name might have served to fortify his prestige without giving offence to his powerful new brother-in-law. On the other hand, the variety exhibited by the small surviving sample of Sitric's coinage might be taken to indicate that it began somewhat earlier.

NOTES

1. M.Dolley and C.N.Moore, 'Some Reflections on the English Coinages of Sihtric Cauch, King of Dublin and of York', *BNJ* 43 (1973), 45-59.
2. J.Lindsay, *View of the Coinage of the Heptarchy* (Cork, 1842), Pl.2, no.52.
3. C.E.Blunt, 'Saxon Coins from Southampton and Bangor', *BNJ* 27 (1952-54), 256-62.
4. For an enlarged illustration see M.Dolley, *Viking Coins of the Danelaw and of Dublin* (1965), fig.29.

5. I am indebted to Mr Michael Kenny of the National Museum of Ireland for the photograph of this coin. M.Dolley, 'The 1973 Viking-age Coin-find from Dunmore Cave', *Old Kilkenny Review*, new ser.1 (1975), 70-79, fig.5b.
6. Lindsay, p.128.
7. D.H.Haigh, 'The Coins of the Danish Kings of Northumberland', *Archaeologia Aeliana*, new ser.7 (1876), 21-77 (at p.63).
8. The early dating was argued by R.H.M.Dolley, 'An Unpublished Irish Hoard of "St Peter" Pence', *NC* 6th ser.17 (1957), 123-32 (Geashill hoard).
9. R.H.M.Dolley, 'The Morley St Peter Treasure Trove', *NCirc.* 1958, 113-14.
10. R.H.M.Dolley, 'The Post-Brunanburh Viking Coinage of York with Some Remarks on the Viking Coinages which Preceded the Same', *Nordisk Numismatisk Arsskrift*, 1957-58, 13-88 (at p.23).
11. *Viking Coins*, p.22 and Pl.VIII.
12. A.P.Smyth, *Scandinavian York and Dublin* II (1979), 9.
13. M.M.Archibald, 'VII Coins and Currency' in *Viking Artefacts: A Select Catalogue*, edited by J.Graham-Campbell (1980), p.109.
14. M.Dolley, 'The Anglo-Danish and Anglo-Norse Coinages at York', in *Viking Age York and the North*, edited by R.A.Hall (1978), pp.26-31. For the most recent comments by Dolley on the coinages of this period see 'Dateringen af de Seneste St Peters-mønter fra York', *Nordisk Numismatisk Unions Medlemsblad*, 1982, 82-91.
15. Dolley and Moore, p.53.
16. C.E.Blunt and B.H.I.H.Stewart, 'The Coinage of Regnald I of York and the Bossall Hoard', *NC* 1983 (forthcoming).
17. I.Stewart, 'The St Martin Coins of Lincoln', *BNJ* 36 (1967), 46-54.
18. In *BNJ* 36 (1967), 54 (cf. *BNJ* 42 (1974), 90-1) it was suggested that the sword St Peter coinage might have outlasted Viking rule at York. But if neither the coins of Sitric nor those of the CS type were struck there, the York series in the 920s becomes less crowded and much of the case for an extension of the St Peter coinage beyond 927 evaporates.
19. Stewart, 'The St Martin Coins of Lincoln'.
20. C.E.Blunt and H.E.Pagan, 'Three Tenth-Century Hoards: Bath (1755), Kintbury (1761), Threadneedle Street (before 1924)', *BNJ* 45 (1975), 20. The doubts expressed by Dolley and Moore (p.52) about the find-spot were made without sight of the ticket and apparently based on a mis-understanding of information offered verbally.
21. The code for numbers 0-9 used by Grantley to record the cost of his coins was Z, B, D, T, F, L, S, K, P, N. The CS coin would thus have cost him 5s.6d.
22. Haigh offered the interesting conjecture that the sword type represented the Sword of Carlus, apparently an heirloom of the Hiberno-Norse dynasty, that figures in three entries in the annals of the *Four Masters* some generations later.
23. I am indebted to Miss Elizabeth Pirie for information about this coin, which she will be publishing in *The Archaeology of York*, vol.18 (Coin Finds), part 1 ('Post-Roman Finds, 1972-81').

24. The coin is illustrated in Blunt and Stewart.
25. Most of the early Anglo-Saxon coins in the Borghesi collection may have been Italian finds, since none of them is identifiable in an earlier English collection.
26. Dolley and Moore, p.50.
27. D.F.Allen, 'Northumbrian Pennies of the Tenth Century', *BNJ* 22 (1936-37), 175-86.
28. Allen, p.176; I.Stewart, 'Recent Work on Viking Coins of the British Isles', *NCirc.* 1967, 269-72 (at p.270); Dolley and Moore, p.57.
29. C.E.Blunt, 'The Coinage of Athelstan, 924-929, A Survey', *BNJ* 42 (1974), 81-83; Lindsay, Pl.4, 112, for one of the Are coins of Lincoln (cf. BM *Sylloge* forthcoming, no.686). Adel-d might be the same name as Aethelerd, found on some York coins of Athelstan (Blunt 307-8) but his coins come late in the reign and a chronologically more suitable Athelstan moneyer's name would be Adalbert, who struck the relatively early church type (Blunt 439; attributed to York, but possibly struck elsewhere). The nearest name to Sibrant in Athelstan's coinage is Sigebrand in *BMC* type I (unlocalized, but of southern style).
30. Dolley and Moore have suggested the possibility that the reverse inscriptions of nos.4 and 5, with their jumbles of A, E, I, N, O and V, could reflect *Lincolia Civit* of the St Martins. Mr Blunt has also pointed out to me that the CS coin no.1 has inscriptions consisting of A, C, I, O and V which, whether read retrograde or outwards, bear some resemblance to the blundered form of *Lincoia Civit* found on the crowned bust coin of Eadred by Are in the Douglas Museum (AREIIICOLAIIVIT).
31. Many of the sources for Sitric's career are given by Haigh, pp.33-39. The most convenient modern works of reference are *English Historical Documents I*, c.500-1042, edited by D.Whitelock, second edition (1979), pp.218, 283 and 306; F.M.Stenton, *Anglo-Saxon England*, third edition (1971), pp.334, 338-39; and Smyth, ch.1.
32. The contraction mark above LVDO could denote a missing N, but this does not make a mint interpretation any more likely.
33. In a paper entitled 'Some Thoughts on the St Peter Coinage of York', read to the British Numismatic Society on 25 September 1979.



1



2



3



4



5



THE CABINET OF THE MARQUESS OF AILESBOURY
AND THE PENNY OF HYWEL DDA

C.E.Blunt

The unique coin bearing the name of Howæl Rex by the moneyer Gillys (Pl., no.1) is first recorded in the sale catalogue of the collection of 'a Nobleman' (who may now be identified as the Marquess of Ailesbury) which was dispersed at Sothebys 29-30 June 1903. It is described as 'of Eadgar (?)...king's name blundered' and forms, with two coins of Edmund, both of the Mercian two line type with rosettes, lot 1 of the sale. These three are the only Anglo-Saxon coins in the collection.

Major Carlyon-Britton, who acquired the lot, was quick to notice the possibility that it had been wrongly catalogued, and writing in 1905 argued for an attribution to the Welsh king Hywel Dda who died in 949 or 950.¹ He noted that all three coins in the lot were coated with a green deposit which suggested that they had been found together and this seems eminently likely.

How these three isolated coins in a collection which otherwise starts in the English series with the Norman conquest came into the possession of Lord Ailesbury cannot be ascertained. There is some evidence that the collection closed in the eighteenth century; the latest English coins, dating down to 1768, are three gold and one silver of George III and there are no less than ten five-guinea pieces of George II, all in splendid condition, six of them of the same date, 1753. This looks like the 'reserve' of gold that people in the past often used to maintain for emergencies.

Of the Charles II Petition crown, lot 102, the catalogue notes that 'the packet containing this coin was sealed in 1789 and was not opened till a few weeks ago'.²

A possible clue to the identity of the founder of the collection may lie in the curious fact that, of the piece that Montagu calls a Roettier pattern farthing of Charles II³ and of which the sale catalogue says 'hitherto this has been considered the rarest of the "Pattern Farthings" of this type', there were in the Ailesbury cabinet no less than eighty-nine specimens, all dated 1676, (lots 105-118) which led the cataloguer to speculate that they may have been 'specially struck for an ancestor of the present owner for use as counters'. Peck rejects Montagu's idea that these were patterns and writes 'it is much more likely that they were official medalets, struck for sale in considerable numbers, mostly in 1676, thereby utilizing the handsome periwigged portrait of the king, which might otherwise have been left to rust. It is significant that they are unknown in copper'.⁴ His comment that those dated 1676 are more common than those dated 1675 is probably no more than a reflection of the number of the former that emerged from Lord Ailesbury's cabinet.

The first Earl of Ailesbury, 1638-85, was one of those responsible for the Restoration of Charles II and held positions at court under that king. He was a Fellow of the Royal Society and Wood is said to have written of him that he 'was a learned person, and otherwise well qualified, was well versed in English history and antiquities, a lover of all such that were professors of those studies, and a curious collector of manuscripts, especially of those which related to England and English antiquities'.⁵

It is not suggested that the Hywel Dda penny necessarily came into the cabinet as early as the seventeenth century, but it looks as if the first earl may have founded a cabinet which was added to spasmodically later.

Carlyon-Britton bases his attribution to Hywel Dda on two distinct criteria. The one, purely numismatic, points to the similarity in style with certain coins of Edmund; the other, historical, argues that he was the most celebrated Welsh king of the name, that he is recorded as having codified the Welsh laws⁶ and his attendance at the English court is reflected in a number of charters that he attested⁷ and this would have made him familiar with the English coinage.

The attribution has found general acceptance. Brooke, who wrote that it 'is scarcely open to doubt',⁸ acquired the coin for the National Collection at the Carlyon-Britton sale in 1917 (lot 993).

Recently, however, not only has the attribution been questioned but doubts raised too as to the authenticity of the coin. Writing in 1976, D.W. Dykes put forward arguments for preferring a later Hywel, one of the six (or eight) vassal kings who are recorded as having rowed King Edgar on the river Dee in his barge in 973. He concludes 'it seems more likely that the Gillys coin, if genuine, was struck at Chester by Eadgar as an honorific presentation to him than as an earlier gift, by a predecessor, to Hywel Dda'.⁹

In an expanded version of this paper, published in 1977, Dykes no longer suggests that the coin might not be genuine but says that it is struck from rusted dies and suggests 'that the ruler's name on the obverse die might have been reworked from a different original. It could well be, therefore, that the original dies of the Hywel coin were normal Gillys productions for Eadred, that they were discarded for some reason and that at a subsequent date were brought into use with a re-worked obverse to honour either Hywel or an identically named successor'. While leaving the matter rather more open than in his first paper, he still appears slightly to prefer an attribution to the Hywel of Edgar's day to the earlier Hywel Dda.¹⁰

The first point must be to consider whether the coin is genuine, and here the discussion on the origins of the Ailesbury cabinet has its relevance. If not genuine, it could be either a contemporary or a modern forgery. If it is right to regard the Ailesbury cabinet as having closed in the latter part of the eighteenth century, the possibility of a modern (i.e. eighteenth-century) forgery may be rejected. A good deal is now known about the work of eighteenth-century forgers in the English series, the most notorious (and competent) of whom was John White. One of his specialities was altering the legends on common coins to make them into rarities.¹¹ So he is an obvious candidate if in fact the name on the obverse has been altered. But, though the dies may be a little rusty, I can see no evidence of a change having been made in the royal name. The circumstances in which the coin first came to knowledge are in its favour. The three coins in the lot seem, as Carlyon-Britton suggested, likely to have come from a common source and bear all the signs of being from the same tenth-century hoard. Had the coin been a forgery of White (or any contem-

porary of his) it would be expected that the forger would seek to sell it for what he had made it purport to be and to get a good price from a serious collector in the series. The company it keeps in the Ailesbury cabinet does not support this.

These circumstances would not, however, preclude its being a contemporary forgery. But contemporary forgeries are usually of light weight or base metal, or both. This coin is of good weight, 23.3 grains, and of good metal, ninety-one per cent silver (see below).

Dykes's grounds for questioning Carlyon-Britton's attribution to Hywel Dda turn largely on the latter's reliance on certain historical points which Dykes feels can be called in question, such as just how he codified the Welsh laws which contained passages suggesting familiarity with coinage and that he 'has been represented as an admirer of Anglo-Saxon civilisation and a sub-regulus frequently attendant at the Wessex court of Athelstan who might well have had a coin struck in his honour'. Dykes points out 'that the earliest recension of the *Laws of Hywel Dda* that has come down to us is to be dated at least two hundred years after his death and it is open to considerable doubt which elements in his *Laws* date from his time: there is furthermore no evidence that the reckonings in money values contained in the *Laws...*are tenth century in origin'. On the other point mentioned above, Dykes wrote in the first version of his paper that 'Hywel Dda, too, is now considered to be less pro-Wessex than has been formerly thought: he is seen as more of a political opportunist perhaps less likely to commend himself as favourite of the English court, and thus meriting the striking of a commemorative coin'.¹²

Without in any way wishing to call in question Dykes's interpretation of the historical evidence, on which the writer is not qualified to pass judgement, the numismatic grounds for an attribution to Hywel Dda may perhaps be restated:-

1. The Hywel coin has, as Carlyon-Britton noted, affinities with coins of Edmund (939-46) (E.g. Pl.,no.2) and this would accord with such dates as we know for Hywel Dda who died in 949 or 950. No less close affinities can now be seen with a coin of Eadred (946-55) from the Chester (1950) hoard, no.175, (Pl.,no.3) and this is actually by Gillys, the moneyer of the Hywel coin. He is not recorded as having worked for Edmund and it seems best, on the evidence at present available, to regard the Hywel coin as having been produced during Eadred's reign. This is slightly later than the date for which Carlyon-Britton argued, namely 'in Edmund's reign soon after his accession', but it must be remembered that he had not then the evidence of the Eadred piece from the Chester hoard.

2. Though Gillys also worked for Edgar, the coins he produced for that king are stylistically quite different. (Pl.,nos.4-6)

3. A metal test carried out by Mr M.R.Cowell of the British Museum laboratory, for details of which I am much indebted to Miss Archibald and to him, indicates that the Hywel coin contained ninety-one per cent pure silver. The analyses carried out on a number of coins of this period in the National Museum of Antiquities at Edinburgh show that such a high proportion of silver is more likely to occur on a coin produced in the 950s than late in the reign of Edgar. If the Hywel coin is to be dated c.973, the contemporary Mercian coins would be of *BMC* type ii, the examples of which in the Edinburgh test, with one exception, fall well below the ninety per cent mark.¹³

To these may be added two other points:

4. Charters demonstrate that, as Carlyon-Britton said, Hywel Dda frequently attended the English court and so would have been well-known there. He attested charters from 928 to 949;¹⁴ in one dated 949¹⁵ which, though its authenticity has at times been questioned, seems now to find general acceptance,¹⁶ as *Rex*. On the sixteen charters that Birch records him as having attested (a few of which are, as usual, open to question) he appears as *Subregulus* on eleven, which can be dated 928-37; as *Undercyning* on one dated 934; as *Regulus* on three dated 937-49; and as *Rex* on the charter mentioned above.

5. On the negative side, nothing appears to be known of the later Hywel of Edgar's time beyond the passing reference to him in the rowing incident.

Dr Dumville makes two further points:

1. The spelling on the coin (*Howæl*) is an attempt (a fair one) to render in Old English orthography the sound of the Old Welsh name. It owes nothing to Old Welsh orthography. Hywel's own secretaries would almost certainly have spelt his name *Higuel*. The total context of the coin is therefore English, whatever exactly that means.

2. *Howæl* was not the only possible O.E. rendering of Hywel. In cartulary-documents we find the forms *Huwal/Huwol* (BCS 675, 697, 705) which we have no particular reason to discredit. *Eowel* is found in BCS 812, another cartulary-text, and there is no reason to reject this spelling either. All surviving originals (BCS 677, 702, and [a tracing of a lost original] 882) give the spelling as on the coin, however.

The three certain charters of Eadred's reign (BCS 815, 882, 883), from different archives, are unvarying in their spelling *Howæl*. Æthelstan's charters show the variety indicated above. There is no certain example from Edmund's reign, but if the witness-list of BCS 812 (dated 943x947) belongs there, the spelling *Eowel* seems to have been used.

On this evidence, especially taken in conjunction with the numismatic evidence, it would certainly be safest to assign the coin to Eadred's reign. The coincidence of the simple designation *rex*, unique in Anglo-Saxon charters for Hywel, in BCS 882/S550 of A.D.949 (? from the Evesham archive) with the coin is striking.

The purpose of Hywel's coin remains in doubt. It can hardly have been part of a serious attempt to produce a Welsh currency or more than one specimen would surely have survived. Dykes's suggestion that it was struck as an 'honorific presentation' certainly seems to be the most acceptable solution.

NOTES

1. P.W.P. Carlyon-Britton, 'The Saxon, Norman and Plantagenet Coinage of Wales', *BNJ*, 2 (1905), 31-56 and *Transactions of the Honourable Society of Cymmrodorion*, 1905-6, 1-30.
2. It is possible that there was a second Petition crown in this collection. My old friend, Mr Shirley-Fox, who was a neighbour of Lord Ailesbury's, told me in the 1920s that the latter had shown him a single coin (perhaps in a case and so not in the cabinet with the rest) which proved to be a Petition crown and which he sold for Lord Ailesbury to Spinks.

3. H.Montagu, *Copper, Tin and Bronze Coinage of England*, second edition (1893), p.48, 13.
4. C.W.Peck, *English Copper, Tin and Bronze Coins in the British Museum, 1558-1958* (1960), p.135, no.43.
5. *DNB* under Robert Bruce, second Earl of Elgin and first Earl of Ailesbury.
6. Dr D.N.Dumville, who has most kindly read my paper and provided a number of valuable points, tells me that this view is not now held, and refers (*inter alia*) to J.G.Edwards, *Hywel Dda and the Welsh Lawbooks* (Bangor, 1929) reprinted in *Celtic Law Papers* edited by Dafydd Jenkins (Brussels, 1973), pp.135-60.
7. Listed by J.E.Lloyd, *A History of Wales*, third edition, 2 vols. (London, 1939), I, 353, to be supplemented by H.R.Loyd 'Wales and England in the Tenth Century: the context of the Athelstan charters', *Welsh History Review*, 10 (1980-1), 283-301.
8. G.C.Brooke, *English Coins* (1932), p.57.
9. D.W.Dykes, 'Anglo-Saxon Coins in the National Museum of Wales', *Amgueddfa. Bulletin of the National Museum of Wales*, 24 (1976), 12-14.
10. Dykes, expanded reprint of 'Anglo-Saxon Coins', published as a pamphlet (1977), pp.12-14.
11. Typical examples are SCBI Glasgow 958, 1014 and 1026 where in two cases the York name EOFE has been altered to make Rochester, ROFE; in the third, York, EOFR, has been altered to make DOFR, Dover.
12. On Hywel's attitude to the English, see now D.P.Kirby 'Hywel Dda: anglophil?', *Welsh History Review*, 8 (1976-77), 1-13.
13. H.McKerrell and R.B.K.Stevenson, 'Some Analyses of Anglo-Saxon and Associated Oriental Silver Coinages', in *Methods of Chemical and Metallurgical Investigation of Ancient Coinage*, edited by E.T.Hall and D.M. Metcalf (1972), pp.195-209.
14. A.J.Robertson, *Anglo-Saxon Charters* second edition (1956), p.305.
15. W.de G.Birch, *Cartularium Saxonicum*, 3 vols (1885-99), III, no.882 (hereafter, BCS).
16. P.H.Sawyer, *Anglo-Saxon Charters* (1968), p.201, no.550 (hereafter S).

ILLUSTRATIONS

1. Hywel Dda. Moneyer Gillys. BM
2. Edmund. Similar type. Moneyer Frard. BM
3. Eadred. O+O type. Moneyer Gilys. BM ex Chester 1950 hoard, 175.
4. Edgar. BMC type IV. Moneyer Gilys. SCBI Edinburgh 576.
5. Edgar. BMC type Id. Moneyer Gillys. BMC 157.
6. Edgar. BMC type II, Chester. Moneyer Gillys. Blunt

THE PENNY OF HYWEL DDA

PLATE



THE 'EADPEARD' VARIETY OF THE HAMMER CROSS TYPE
OF EDWARD THE CONFESSOR

Paul Robinson

In 1960 Michael Dolley and F. Elmore Jones discussed the left-facing bust variety of the Pointed Helmet type of Edward the Confessor (*BMC* VII b), which, they argued, was a transitional variety belonging early in the issue of that type.¹ More recently, B.H.I.H. Stewart and C.E. Blunt have re-examined the Facing Bust/Pyramids coins of Edward the Confessor (*BMC* XIV) and have argued that the obverse design of these coins represents an initial design for the issue of the Pyramids type (*BMC* XV), which was subsequently superseded by the normal type of a profile bust.² Within the Hammer Cross type of Edward the Confessor (*BMC* XI) there is a small group of coins which differ nearly always consistently in the design of their obverses from that of the normal type, i.e. as it is described, for example, by J.J. North and B.E.H. Hildebrand. They may be considered as forming a separate variety of that type and it may be shown that the variety was again a transitional one, with the obverse dies for these coins designed and cut before the normal design was finally decided upon. The variety was not discussed by Michael Dolley in his paper upon a group of coins from the Seddlescombe find in which he isolated varieties within the Hammer Cross type.³ It was, however, briefly mentioned and accepted as a variety in its own right in the sale catalogue of the collection formed by F. Elmore Jones (Glendining, 12 and 13 May 1973) in which there were two examples present. The purpose of this present paper is, in effect, to expand and clarify the observations made there. All the coins are illustrated.

The points of difference from the normal Hammer Cross type coins are as follows:

- i. The legend begins at eight o'clock by the king's right shoulder and runs without a break to four o'clock by his left shoulder (on the normal coins the inscription begins at or near the top of the coin and is broken by the king's shoulders).
- ii. There is no initial cross (on the normal coins the X of REX at about eleven o'clock appears to serve a dual purpose as also the initial cross).
- iii. The king's name is rendered EADPEARD or, in one instance, EADPERD (on the normal coins it generally appears as EADPAR RD or, less frequently, as EADPAR D). The form of the king's name links the variety with the preceding type, Sovereign/Eagles (*BMC* IX), where it is frequently rendered EADPEARD or EADVVEARDVS, that is, with EA as the second vowel group. They reflect the early types of Edward the Confessor's coins where there is a tendency for the second vowel to be an E. The spelling of the name with the second vowel as an A

becomes common first in the coins of the Sovereign/Eagles type (*BMC IX*), and is then universally employed with the normal Hammer Cross type (*BMC XI*) and the two subsequent and final types of Edward the Confessor, Facing Bust/Small Cross (*BMC XIII*) and Pyramids (*BMC XV*). This shows that the variety is a transitional one, designed at the beginning of the preparation for the Hammer Cross issue. Thus the abandonment of the design of the transitional Hammer Cross coins and the adoption of the normal type marks the point when it was decided finally to abandon the middle E in the king's name and to use an A.

- iv. On three of the obverse dies the inscription continues after REX with a part of ANGLORUM (on the normal coins the legend ends with RE(+), save upon a group of presumably early dies used at Exeter⁴ and on individual dies used at London (*BMC 1035*) and some other mints which include an A at the end of the legend). The lettering is often large and ungainly. This is particularly noticeable on the obverse dies employed by Saewine at Wilton and Godwine at Bristol, which are similar in style to a normal coin of Blacaman struck at Dorchester (F. Elmore Jones, 254) in an anomalous style. Otherwise the lettering on the normal coins of the type is generally smaller and neater.
- v. The costume on the bust of the king is shown in four different ways, with minor variations within each of these. Each style differs substantially from the form of the costume on the normal coins. The four styles are illustrated and described below as Groups A - D. On none of them is there the line of pellets beneath the lowest horizontal line denoting drapery, as is generally found on the normal coins.
- vi. The eye, which on normal coins of the type generally takes form A or B (Figure 1) is on coins of this variety generally shown as C. The exceptions occur on the dies employed by Aelfwine at Winchester (D), Godwine at Bristol (E) and Guolcwine at Gloucester, where it is in the same form as that on the normal coins. Again, save upon the coin of Guolcwine, there is no pellet on the king's cheek, a feature generally found on the normal coins.



Fig.1

- vii. The sceptre is normally headed by a trefoil of pellets (rather than by a quatrefoil of pellets as generally found on the normal coins). One coin of the variety, however, *BMC 547* struck by Aelfwig at Hereford, does have a sceptre headed by a quatrefoil of pellets, while Michael Dolley has drawn attention to the occasional occurrence of normal coins of the type where the sceptre is headed by a trefoil of pellets.⁵
- viii. While on the normal coins the individual strokes of the king's beard are generally shown either curving slightly inwards or formed as in Fig. 2, on the coins of the variety, the beard is frequently found formed of spaced vertical strokes (Saewine and Alfwold at Wilton, Godwine at Bristol, Aegelric and Aelfwig at Hereford). In some instances the strokes are slightly curved (Leofwold at Winchester, Guolcwine and Ordric at Gloucester), while on

Fig.2

one exceptional coin (Aelfwine at Winchester) the curvature of the strokes is exaggerated to give a very 'bushy' effect to the beard. On no coins of the variety are the strokes of the beard formed as in Fig.2.

In his brief discussion of the Hammer Cross type coins in the British Museum collection, Michael Dolley classified the forms of the king's crown into three main types: the crown with an empty band; that with a band enclosing jewels; and that with a band with vertical divisions.⁶ Among the coins of the variety, strictly speaking the first form only is found (Fig.6, Bust D). Three further designs of the crown occur within the variety: firstly, where the band is jewelled but terminates at each end with a large pellet (Fig.3, Bust A); secondly, where the band is jewelled (save in one instance), but has straight ends (Fig.4, Bust B); thirdly, where the upright strokes above the horizontal band do not stop at the top line of this band but extend through it, and the band terminates with two curved lines at each end (Fig.5, Bust C). The four forms of the crown correspond to four main forms by which the king's costume is depicted, to give four main styles for the coins of the variety.

The coins are listed below in their separate groups. The number of surviving examples is not large, consequently the groups are represented by relatively few coins, in one instance by a single coin only. It is then possible that certain characteristics ascribed to each group may prove, when further examples of that group come to light, not to be typical of it. Of the four styles listed as Busts A to D, D is almost certainly the latest as the style of the drapery anticipates (but is far from identical with) that on the normal coins. Moreover, the form of the crown is one of those employed by the normal coins, while one coin of the group is a-typical in showing the eye in the form of the normal coins. The form of the drapery upon Bust D is based upon that on Bust B but reversed. Bust B is then likely to have been employed after Bust A. Bust C is an exceptional type difficult to place in the sequence. I have tentatively placed it before Bust D as the band of the crown does have curved ends of a sort. The exotic crown and very elaborate drapery suggest, however, that it is best regarded as an aberration from the probable proper sequence of A, B and D.

Bust A is at present known from only two obverse dies employed at Winchester and Gloucester. The narrow band of the king's crown is jewelled and at each end are large pellets. The central upright bar of the crown rises slightly higher than the two end bars. The brooch on the king's right shoulder is shown by an annulet (a feature seen also on Bust C). The drapery over the right shoulder is shown by two pairs of lines running diagonally downwards to the right and the left from the annulet. No drapery is shown to suggest the left arm. Four gently curving horizontal bands of drapery, three of which begin at the annulet, run across the king's chest, slightly downwards from the viewer's left to right. There are two spaced pellets on the shaft of the sceptre. The legend continues after REX with a part of ANGLORUM. Fig.3 Bust A



Winchester, Leofwold.

1. Reverse a. Obv. **EADPEARDREXANG.** Rev. **+LEOPOLD·ON·KI·NCE**

BMC 1473, ex Chancton find (1866). Die ratio + . Wt
19.8grs

1. Reverse b. Obv. same die as 1a Rev. **+LIOFPOLDONPINCE∞**
 F. Elmore Jones collection (Glendining 12 and 13 May 1971),
 956. Die ratio not noted. Wt 19.2grs
1. Reverse c. Obv. same die as 1a and b Rev. **+LIOFPOLDONPINCEST**
 i. BMC 1478, ex Chancton find (1866). Die ratio +.
 Wt 19.4grs
 ii. SCMB 1978, E 171 = NCirc 80 (1972), 8388. Die ratio
 and weight not noted.

Gloucester, Ordric.

2. Obv. **EADPEARDREXIA** Rev. **+ORDRIECMLEIPCEST**
 SCBI 9: Ashmolean part 1, 941. Die ratio +. Wt 19.3grs.

J.D.A.Thompson read the mint name as LEICCEST and ascribed the coin to Chester. Ordric, however, is not cited as a Chester moneyer in the Chester syllage and the ascription of Ordric to this city (from this coin) is queried in J.J.North, *English Hammered Coinage*, I (1963). The name is not a common one. Under Edward the Confessor a moneyer, Ordric is recorded only for Hereford in the Radiate/Small Cross type (SCBI 18. Copenhagen part IV, 898) and for Gloucester in the Hammer Cross type (SCBI 19. Bristol and Gloucester, 100 - not in the Sovereign type as incorrectly stated in the chart of moneymen at Gloucester facing page 112). He struck at this mint also under both Harold II (BMC 34) and William I (BMC 16 and 85). Reading the fourth letter of the mint name upon SCBI 9. Ashmolean part 1, 941 as a wen which it certainly resembles, rather than as a C, which it does not resemble as it lacks the bottom stroke and has a clear loop at the top of the letter, then the name can be read as a slightly blundered form of the Gloucester mint signature, with the omission of the initial G. The appearance of the diphthong ei in the spelling of the mint name of Gloucester on coins of Edward the Confessor has been discussed by Dr M.Gelling⁷ and presents no serious obstacle to this reading.

In Bust B the nose, the front end of the band of the crown and the right upright stroke above the band are in a straight line. The end of the horizontal band on the left side is similarly straight and is a continuation of the left upright stroke of the crown. The band encloses jewels, but not on the die employed at Wilton by Saewine which may be unfinished as it also omits the balls which surmount the three upright strokes of the crown. The brooch on the king's right shoulder is shown by a solid pellet. The number of vertical strokes at this side to indicate the folds of drapery over the king's right shoulder varies, but as with Bust A, there are none on the left side (save upon BMC 1351, struck by Alfwold at Wilton, which does show both an additional pellet-brooch and two vertical lines of drapery on this side). The die of Aelfwine at Winchester shows what appears to be a fillet formed of a line with three pellets suspended from the back of the crown. It is exceptional in this respect, although it is possible that a fillet was intended at the side of the crown on the die of Alfwold at Wilton and on that of Aegelric at Hereford (9 below, under Bust D).



Fig.4 Bust B

Bristol, Godwine.

3. Obv. **EADPEARDRE** Rev. **+EODPINEONBREEC**

SCBI 19: Bristol and Gloucester, 36a, ex F. Elmore Jones collection (Glendining, 12 and 13 May 1971), 116. Die ratio +. Wt 20.1grs. Same reverse die as BMC 39.

Wilton, Alfwold.

4. Obv. **EADPEARDREX** Rev. **+ALFPOR·ONPILT:**

BMC 1351, ex Chancton find (1866). Die ratio +. Wt 19.4grs

Wilton, Saewine.

5. Obv. **EADPEARDREX** Rev. **+SÆPINE·ONPILTV**

i. Devizes Museum, ex Rose collection (Glendining, 13 March 1974) 167. Die ratio +. Wt 18.5grs

ii. R.C. Lockett collection, 849 (photograph in British Museum), ex John Dudman collection (Sotheby, 15 December, 1913) 259. Die ratio and weight not noted.

iii. J. Moody collection. Die ratio and weight not noted.

Winchester, Aelfwine.

6. Obv. **EADPEARDRE** Rev. **+ALFPINE·ONPIN**

Museum of London, ex Queen Victoria Street, London find (1872). Die ratio +. Wt 17.0grs

Only one coin is known with Bust C which shares with the coins of group A the use of an annulet for the brooch on the king's right shoulder, and with coin 4 in group B the appearance of a second brooch on the king's left shoulder in the form of a pellet, with vertical lines of drapery to indicate the king's left shoulder. The appearance of a band of jewelled drapery at the king's throat indicates, however, that the design should be treated as a separate class in its own right.⁹ There are other features peculiar to the design. The horizontal band to the crown is longer and the three upright strokes of the crown do not terminate at the top of the band but continue through it, and there is a single jewel in each insterce. There are additional curved bands around the upper ends of the horizontal band. There are five parallel lines of drapery over the king's right shoulder and traces of six lines over the left shoulder, while the horizontal fold-lines which fall away from the annulet on the right shoulder are in two pairs of lines. The sceptre has a quatrefoil of pellets at the head and the king's name is rendered EADPERD rather than EADPEARD.

Hereford, Aelfwig.

7. Obv. **EADPERDRE** Rev. **+ELFIONHEREFOR**

BMC 547, ex Queen Victoria Street, London find (1872). Die ratio +. Wt 19.7grs



Fig.5 Bust C

Bust D is known from two coins only and it may be significant that both are from mints in the South West Midlands rather than from Wessex. The design is clearly approaching that of the normal Hammer Cross type coins. This is shown firstly by the form of the drapery, which in essence is that found on Busts A and B but reversed in a somewhat unrealistic manner so that the horizontal folds of the drapery fall downwards from the pellet-brooch on the king's left shoulder. The two coins differ slightly in their treatment of the drapery at the king's right shoulder. On the coin of Aegelric at Hereford, there is a second pellet-brooch at this shoulder but no lines representing drapery over the upper arm are shown falling diagonally or vertically from it. On the coin of Guolcwine at Gloucester, however, there is an annulet brooch at the king's right shoulder and two pairs of lines fall diagonally from it to right and left, reminiscent of both coins 5 and 7 above. Secondly the form anticipates that of the normal coins of the type in the treatment of details of the king's face. While on the coin of Aegelric of Hereford the form of the king's eye is C (Fig.1), on that of Guolcwine at Gloucester it is A, one of the forms characteristic of the normal coins. On this coin also appears a pellet on the king's cheek, a common feature of the normal coins of the type. Finally, the crown has a narrow band with curved ends, one of the forms of the normal coins. It should be noted, however, that neither coin shows the line of pellets below the bottom line representing the horizontal drapery, a feature of the normal Hammer Cross coins but which, as is stated above, is always absent from the coins of this variety. The forms of the legends, too, on these two coins in no way anticipate that of the normal coins.

Gloucester, Guolcwine (Silacwine ?).⁹

8. Obv. **EAD[PE]RDR.** Rev. **+GVOL[EP]HEONCLEPC:**
SCBI 19. Bristol and Gloucester, 105. Bt Spink, ex Argyll and Carlyon-Britton collections. Die ratio +. Wt 18.8grs. Same reverse die as BMC 466.

Hereford, Aegelric.

9. Obv. **EADPEARDREXAN** Rev. **+ELRIC:ONHL·RELOE**
SCBI 18. Copenhagen part IV, 896. Bt Curt (1858). Die ratio +. Wt 19.6grs. Same reverse die as BMC 551. The moneyer is possibly the same person as the ELLRIC (= Aegelric) who was a moneyer at Worcester and who received an early, left-facing bust variety die in the Pointed Helmet issue.

As the number of surviving coins of this variety of the Hammer Cross type is small, the conclusions should not be considered as absolutely final. Nevertheless, it may be seen that it is apparently restricted to a small number of important mints in a fairly localised area of Wessex and South-West Mercia. The Hammer Cross issue is not one that is well represented among the mints of Western and South-West England, as no major hoards concealed either late in the Saxon period or shortly after the Norman Conquest are as yet known from that area. It should not, then, be assumed that the tally of coins of the variety is complete and future finds may well show that it was struck at other mints in West or South-West England.



Fig.6 Bust D

In their paper on the transitional coins of the Pointed Helmet type (*BMC* VII b), Michael Dolley and F. Elmore Jones had concluded that 'slowly but surely the evidence is accumulating that it was normal practice to cut dies first of all for peripheral mints, presumably so that all mints could begin striking on approximately the same day'.¹⁰ They point out that no coin of that variety is known from Winchester: indeed, none is known for any mint in the eastern half of Wessex. Coins of the transitional Hammer Cross type (the next-but-one type to the Pointed Helmet issue) appear, however, at a different pattern of mints from those at which the transitional Pointed Helmet type coins are found. In Southern England they are found at mints which had not received the transitional Pointed Helmet type dies (Winchester, Wilton and Bristol), the first two lying of course in eastern Wessex rather than at the periphery. In South-West Mercia, however, the dies were sent to two mints which had received the transitional Pointed Helmet type dies. This must then either contradict the conclusions of Dolley and Jones or we must allow that transitional dies might be sent to different groups of mints for two different reasons.

There are other factors which are remarkable with the transitional Hammer Cross type coins. Firstly, the number of coins appears to be small: the variety is known so far at only five mints in a fairly restricted area, in contrast to the transitional Pointed Helmet coins which are known from fourteen mints in an area reaching as far as Lincoln and Chester. Secondly, the moneyers who employed the transitional Hammer Cross type dies were in many cases far from being the senior moneyers at their mints. For example, at Winchester Leofwold commenced striking only in the Hammer Cross type and it is difficult to see why he should have received preferential treatment in being one of the two moneyers at that mint who received the first Hammer Cross type dies. At Wilton, the moneyer Saewine began only in the previous type, Sovereign/Eagles, and did not strike after the Hammer Cross type. Alfwold, on the other hand, was an important moneyer at Wilton in the three types preceding the Hammer Cross type. In that issue, however, and in subsequent issues his output appears to have been fairly restricted. At Gloucester, Ordric is recorded as a moneyer only in the Hammer Cross type, while Silacwine's period of activity was restricted to three types only, from Sovereign/Eagles to Facing Bust/Small Cross. At Bristol, Godwine is not known as a moneyer for the two types preceding the Hammer Cross type (although he did strike in Expanding Cross) and no coins struck by him are known after the Facing Bust/Small Cross issue.

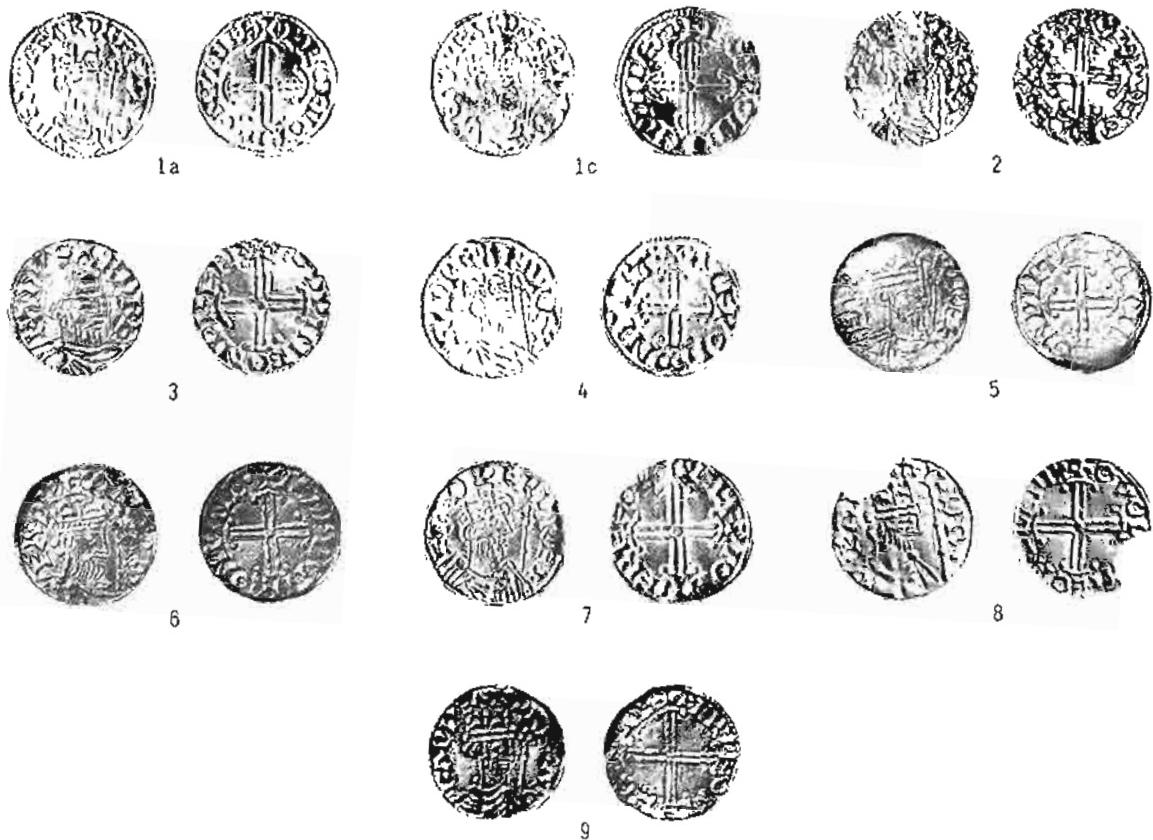
The association of coins of the Hammer Cross variety with moneyers who must have been of lesser importance at their mints suggests that these dies were not necessarily distributed before the true Hammer Cross type dies. They may have been withheld (perhaps because they were too different from the true Hammer Cross type or too reminiscent in their design to earlier types) and were sent out only at a later date perhaps to complete quotas of dies supplied to those mints and used either for the sake of economy or to save time. While this is, admittedly, purely hypothetical, it does provide an alternative interpretation to the phenomenon of 'transitional' dies that better suits the transitional Hammer Cross coins. The present writer would be first to admit that future evidence could well provide a different, more convincing explanation.

NOTES

I am grateful to the museums mentioned above for permission to include here their coins and for providing photographs of them, and wish to acknowledge the particular help I have received from Miss M.M.Archibald, Mr W.A.D. Freeman and Dr D.M.Metcalf. Mr C.E.Blunt and Dr B.H.I.H.Stewart kindly read the text and made helpful comments for its improvement.

1. R.H.M.Dolley and F.Elmore Jones, 'Some Remarks on BMC Type VII Var. B of Edward the Confessor', *NC* (1960), 183-90.
2. B.H.I.H.Stewart and C.E.Blunt, 'The Droitwich Mint and BMC Type XIV of Edward the Confessor', *BNJ* 48 (1980), 52-57.
3. R.H.M.Dolley, 'A Small Parcel of Coins of Edward the Confessor from the Seddlescombe Find', *BNJ* 31 (1960), 76-81, esp. p.81.
4. At Exeter, the extended reading +EADPAR:REXA is found on SCBI 2. *Hunterian and Coats* no. 1124 and lot 220 in the R.P.V.Brettell collection (Glendining, 28 Oct.1970). +EADPARRDREXA is found on SCBI *Hunterian and Coats*, no.1125. +EADPAR'DREX:A appears on Brettell lot 192. SCBI 17. *Midlands Museums* no.440, with BMC 226 and 228 read +EADPARRDREA. Finally it is relevant to note that Brettell lot 219 includes the X of REX although not the A of ANGLORUM.
5. Dolley, 'A Small Parcel', p.81.
6. Dolley, 'A Small Parcel', p.81.
7. M.Gelling, 'The Mint Names' in SCBI 19. *Bristol and Gloucester Museums*, 113f.
8. According to Dolley and Jones, Bust C of the transitional variety of the Pointed Helmet type has a jewelled band at the king's throat, and it is a characteristic part of the design in the Small Flan and the Expanding Cross types.
9. The name is discussed in SCBI 19. *Bristol and Gloucester Museums*, p.117f. Note the use of two different forms of the letter G on the reverse, assuming, that is, that G is intended by the first letter of the moneyer's name.
10. Dolley and Jones, p.190.

PLATE



INNERWICK HOARD, 1979

D.H.Caldwell, Joan E.L.Murray and M.Delmé-Radcliffe¹

The find

The coins were found at Thurston Gardens, Innerwick, East Lothian (NGR NT 708744) in 1979. This site was being cleared by machine for the erection of huts to house the men working on the nearby Torness power station project and several coins were turned up by a bulldozer towards the end of June. A rumour to this effect reached the National Museum in Edinburgh and on the police being informed eleven coins were acquired from workmen on the site. Thanks to the help of the police and a campaign of publicity in the local press and radio the Museum was able to recover the rest of the coins from locals over the following few weeks. The one gold coin turned up on the site about a year after the initial discovery. Fifty-three of the coins were not found at Thurston Gardens itself but at the cement works at Dunbar where earth was taken from Thurston Gardens and dumped. All the coins recovered from these sources are likely to have belonged together and have been listed here, except one bodle (turner) of Charles II, second issue, 1677 or 1678. Such coins occur commonly in Scotland as stray finds.

Careful enquiries were made to see if any information could be got on how the coins were found in the ground or whether there were any signs of a container. It is evident that the finders only became aware of the presence of the coins once they were scattered by the earth-moving machinery and no pieces of pottery, leather, metal, etc. were noticed which might have been part of what they were buried in.

Treatment of the coins

All the coins were given in to the Museum in the condition in which they came out of the ground, except one group of seventy-seven. The finder of these has attempted to clean them in vinegar but does not seem to have altered their appearance significantly by so doing. Generally the coins were quite clean but about a third had corrosion deposits, some green (copper) others lilac (horn silver). Two had specks of iron. All were cleaned in the Museum's conservation laboratory with ammonium thiosulphate (fifteen per cent in one per cent lissapol) and thoroughly rinsed in deionised water and dried in acetone. They were weighed before being lacquered with frigilene.

Disposition

The following coins have been acquired by museums and the rest have been returned to the finders. National Museum of Antiquities of Scotland. 6, 10-12, 14, 15, 17-21, 25-31, 34, 36, 38-42, 44-49, 51, 57, 104, 105, together with fifty-two of the English ones, as representatives of the Scottish currency at that time.

Hunterian Museum. 63, 69, 93, 103.

Ashmolean Museum. 50, 52-54, 64, 70, 72, 75, 76, 79, 82, 100, 102.

A complete photographic record of the hoard has been made, and will be retained by the National Museum.

Summary listing

The following listing includes currency values, which are mainly those introduced in October 1467. Although at least four revaluations intervened, this tariff certainly applied for old and new English groats in 1485, and presumably also for old Scottish groats.² All the coins are silver, unless otherwise stated. The values in the tariff column refer to groats.

SCOTTISH (Edinburgh mint, unless otherwise stated)	Tariff	£	s	d
	Groats	Half-groats	Pennies	
David II	2	1	-	16d. 3 4
Robert II	1	-	-	16d. 1 4
Robert III	1	-	-	12d. 1 0
James I, lis coinage	14	-	-	8d. 9 4
James II, lis coinage	3	-	-	2 0
Stirling	1	-	-	8
James II, crown coinage (Gold) 1 lion	29	1	-	14d. 13 4
Stirling	1	-	-	1 2
Aberdeen	1	-	-	1 2
Perth	1	-	-	1 2
James III, mullet issues	40	-	6	12d. 2 1 6
Berwick	2	-	-	2 0
(Crux Pellit coppers, not valued)			2	
Scottish Total	107	coins		Value 5 12 5

ENGLISH and ANGLO-IRISH
(London mint, unless otherwise stated)

Edward III	17	20	16d.	1 16 0
York	1	3		3 4
Henry V (including fragment)	6	3		10 0
Henry VI (including forgery)	19	3		1 7 4
Calais	51	14		3 17 4
Edward IV heavy coinage	2	-		2 8
Total Old English	96	43		7 16 8

	Groats	Half-groats	Pennies	Tariff	£	s	d
Edward IV light coinage	6	-	-	12d.	6	0	
Coventry	1	-	-		1	0	
York	1	-	-		1	0	
Durham	-	-	1				3
Dublin	3	-	-		3	0	
Trim	1	-	-		1	0	
Total 'new Edward'	12	-	1		12	3	
English Total	152 coins			Value	8	8	11
Overall	259 coins			Value	14	1	4

The currency value might, of course, have been lower, if some of the old pieces were not acceptable at these tariffed values, because of their very low weight; but the records give no evidence about minimum weights. Equally, the value could have been higher, if not all the hoard coins were recovered. As the Irish groats were of English type, they were doubtless accepted in Scotland at the same rate as other new Edward groats.

Dating

The latest coins in the Innerwick hoard are twenty-three five-pointed mullet groats and six silver pennies of James III, S. group IV,³ probably introduced in 1482 or 1483. All four groat obverse dies are well represented, with seven coins from what appears to be the latest obverse die in use (on the basis of the die-links, for which see pp.144-45). The Innerwick pieces show little sign of wear, but the same is true of some of the earlier groats of the same reign. A heavier groat was first specified by parliament in February 1484,⁴ and three-quarter face portrait groats (S. group VI) of the new heavy standard were struck on a relatively large scale, but the absence from the Innerwick hoard of these (and also of the rarer heavy types) is not very reliable as dating evidence: these heavy groats were absent from the Perth hoard, with deposit date about 1500, although not from other hoards of similar date.⁵ An act of parliament in 1493 mentions 'refusing of the [Scottish] money...for the diversitie of divers cunyeis of silvir strikin be divers cunyeouris'.⁶ Such refusal may have particularly applied to the group VI groats, because of their unconventional representation of the king. In relation to the silver content, their currency value of 14d. was almost identical to that of the preceding light groats, but the fact that the value was the same as the obviously heavier crown groats may have contributed to mistrust of the new groats. The deposit date should thus be put not earlier than 1484, and possibly several years later.

The coins were found about 100 yards from the site of the eighteenth-century house of Thurston, but the site of the fifteenth-century house is uncertain. The lands of Thurston (and Woodhall), in the sheriffdom of Edinburgh and constabulary of Haddington, had long been included in the barony of Renfrew, which at the relevant time was part of the patrimony of the prince of Scotland. These lands were held in feu ferm by Wallace of Craigie; as his principal estate was in Ayrshire, it was doubtless a tenant who actually occupied Thurston, and who may well have been the owner of the hoard coins.

The currency value of Innerwick hoard, as found, was close to £14

Scots. Such a sum might represent short-term savings, put aside - possibly within the house, rather than in the ground - by the tenant of Thurston, perhaps to cover his rent, which was at least £10 yearly. (Thurston and Woodhall together were '20 libratas terrarum antiqui extentus', and Woodhall was let for £10 per year to a kinsman, David Wallace.)⁷ While any suggestion of a reason for the loss of the hoard coins can only be very tentative, it is possible that their owner was killed in 1488, in the rebellion which culminated in the battle of Sauchieburn, on 11 June. It is, however, perhaps more likely that their loss arose from private feud, since there was well-documented contention for the beneficial occupation of Thurston between Humes of Wedderburn and the Wallace owner. At some date before 1495, George Hume and his son David led about one hundred men in the 'masterful destruction, burning and casting down of the place of Thurston pertaining to William [recte John] Wallace of Craigie'.⁸ This destruction might have prevented the owner of the coins from finding them again, or he might have abandoned them for fear of the Humes. The case came before the lords of council (sitting as the supreme civil court) on 3 November 1495. There are, however, some reasons to think that this Hume attack on Thurston might have taken place as early as 1488. One is the involvement of so many men, surely more than were needed to overwhelm the people of Thurston. In the 1488 revolt the Humes of Wedderburn doubtless mustered their full strength against James III, since Humes of the senior line were prominent rebels; and this would also provide an opportunity to pursue private aims by force.

Humes of Wedderburn were already involved with Thurston in 1479, when George Hume appears to have resided there, presumably with a lease of the property.⁹ In James IV's reign, the lands of Thurston may well have been in Hume hands continuously up to 1501, as they were (in part, and wrongfully) from Whitsun 1493 to June 1494, and also in November 1497, when the king granted a lease of them to David Hume, having compensated Wallace with other lands.¹⁰

Although a date just before James IV's accession, for the Hume attack on Thurston, involves assuming that John Wallace acquiesced in Hume occupation of the property for several years from 1488, this is not particularly unlikely, in view of the powerful position of the Humes (and their allies) after their prominent part in the rebellion. A few days after the young king's accession, a commission was set up to grant leases of vacant crown lands, and it is conceivable that it was on condition of allowing Hume of Wedderburn a lease of Thurston that John Wallace then received the custody of Dundonald castle (in Ayrshire), on favourable terms.¹¹ The proximate cause of his taking legal action over the Hume attack on Thurston may have been the need to counter George Hume's summons against him and his brother, which was the immediately preceding case before the lords of council.

The Scottish content

There are six hoards of suitable date which have been described in sufficient detail for comparison with Innerwick. These are Ayr 1862, Kilkerran 1892, Perth 1920, Whitburn 1921, Glenluce 1956 and Rhoneston 1961.¹² All except Rhoneston contained some coins of James IV, and that, in which (like Glenluce) the bulk of the hoard was of billon pennies, also had later coins than Innerwick. Table I summarises the groat and half-groat contents of these.

The one gold coin, although found about a year later than the rest, has been accepted as part of the hoard. By coincidence a James II lion was also the only gold piece in the Whitburn hoard, the closest in currency

TABLE I. *Numbers of groats and half-groats in the Innerwick hoard and six others, by major types. The approximate deposit date is given for each.*

Reign or period	Type	Innerwick 1485+	Rhoneston 1490	Glenluce 1495	Ayr 1495	Perth 1500	Whitburn 1500	Kilkerran 1500
<i>Scottish</i>								
- 1424		4,1			-,1	3,-	1,1	1,1
James I/II	Lis	18			7	112	15	1
James II	Crown	32,1	2,-		3,-	161,12	76,1	1,-
James III	(Placks)		(4,-)	(2,-)		(436,63)	(5+,-)	(1,-)
	Mullet	42	4,-		19,1	56,5	28,1	4,1
	Thistlehead and mullet			6,3	6,-			11,2
	$\frac{3}{4}$ -face left			1,-	55,5		38,2	8,2
James IV	Heavy				2,-		6,1	4,-
	Mullet							1,-
<i>English</i>								
Edward III	'Old'	18,23	1,-	-,1	2,8	17,83	10,19	2,8
Richard II to 1464	'Old'	78,20	2,1	1,-	7,9	50,98	40,2	13,7
Edward IV from 1464	'New'	14,-	1,-		1,-	3,2		5,1
1483 on	'New'							2,-

value to Innerwick. The proportion, by value, of the English coins in the Innerwick hoard is about sixty per cent, which is higher than usual for this period, although similar to the small Kilkerran hoard: for Perth, Ayr and Whitburn, this proportion was roughly twenty to thirty per cent - but about forty-six per cent, by value, of the silver coins in the Perth hoard. As for Scottish hoards from earlier in James III's reign, there was an overwhelming preponderance of English coins in the silver content of three, namely Bridge of Don (1937), New Cumnock (1882) and Crookston (1797); but in the mainly billon Leith hoard (1980), with deposit date c.1470-75, the proportion by value of the English coin among the twenty-six silver pieces was about twenty-eight per cent.¹³

The David II and Robert II coins (and those of Edward III) were more than a century old when deposited, and, as would be expected, they are much worn and clipped. The one Robert III groat is better, but it is only the fleur-de-lis groats of James I (introduced about 1424) and later coins that have been fully studied by dies. There are several fleur-de-lis groat

dies not previously represented in the National Museum of Antiquities of Scotland (NMAS), while in the crown groat series there is one obverse die new to NMAS (but recorded elsewhere) and a few new reverse dies.

The fine silver light groats of James III were already very well represented in NMAS and other major museums, and nearly all the Innerwick specimens are of known die-combinations. There are no fewer than three of the group IV/III mules, and one, no.79, shows the obverse die in the latest known state: two die cracks can be seen, one inside the stop between Dei and Gra, as well as one outside this, which is commoner. One of the silver pennies, no.105, deserves special comment, because the reverse die was originally made as if for the billon pennies. The correct mullet for the silver pennies, punched over the three pellets, can be seen in the first legendary quarter (although not very clear on the plate), and presumably one was also overpunched in the third quarter. The inscription reads Edinburgh, as on billon pennies, instead of Edeinbour. The close relationship between the silver pennies and the corresponding billon ones is well known, but (as mentioned in the Glenluce hoard report) no obverse die-link has been found, and this also applies to the altered reverse die.

The question has arisen whether the extent of duplication among the James III mullet groats in this hoard is evidence of sluggish circulation. For group IV, however, the number of duplicates (including the mules) is slightly below what would be expected on the basis of the non-Innerwick specimens. The twenty-three Innerwick ones provide 253 comparisons (i.e. pairs of coins) and nineteen duplicates; and the forty-nine others, 1176 comparisons and 108 duplicates. No such calculation is available for the mullet groats as a whole, and indeed it would be difficult to obtain an unbiased sample for groups I and III, where the varieties of head are so distinctive that they are likely to be over-represented when several collections are combined.

A noteworthy feature of the Innerwick hoard is the complete absence of the substantial issue of thistlehead-and-mullet groats (James III, S. group II), and of billon pieces. In fact, group II groats were also absent from Perth and Whitburn, the two largest of the comparable hoards, and from Rhoneston, although present in Ayr and Kilkerran, and also Glenluce: in the latter hoard, consisting mainly of billon pennies, these rather base groats were among the more valuable coins. Placks were present in five of these other six hoards, being particularly plentiful in the richest one, Perth. Their absence from the Innerwick hoard, however, is not surprising: after problems in getting them accepted, placks were 'declamatis pro duabus partibus' in 1486, i.e. tariffed at two-thirds of their previous value, but perhaps still above their intrinsic value.¹⁴

As the owner of this hoard could afford to be selective and eschewed billon and base silver, there must be some doubt as to whether the two copper coins were part of the same deposit, rather than casual losses in the same area. The attribution to Scotland of these Crux Pellit pennies – for which the familiar names, 'Bishop Kennedy' or 'Crosraguel' penny, should perhaps be avoided – is not accepted by all numismatists, but is supported by the multiplicity of finds in Scotland, and the Innerwick ones at least add to this evidence. Moreover, their association with a hoard probably deposited late in James III's reign is entirely appropriate, if they were part of the regal black money which was devalued in 1482, in the Lauder crisis, as most recently argued.¹⁵ Unfortunately these pieces are very corroded and it is impossible to form any estimate of how long they had circulated, which might have been interesting because of alternative attributions which would put their striking several decades earlier.¹⁶

Catalogue of the Scottish coins

The following abbreviations are used, generally with a number:-

- B Burns (Coats collection, in NMAS), for E.Burns, *The Coinage of Scotland* (Edinburgh, 1887). Three-figure numbers refer to figures in vol.iii, while smaller numbers are for denomination within reign, in vol.i up to Robert III, vol.ii for James I onward.
- R NMAS, in A.B.Richardson, *Catalogue of the Scottish Coins in the National Museum* (Edinburgh, 1901).
- P NMAS, from Perth hoard, by accession no. (thus P 76 stands for xi.20.76).
- BM British Museum (many being ex-Pollexfen).
- PM Perth hoard specimens in the City of Perth Art Gallery and Museum, numbered by position on the photographs taken by the BM in 1967 (crown groats only).

In the descriptions, quarters are legendary ones, not heraldic. (In the case of 25-29, the outer and inner legends start in different quarters, and the inner one is used, since it alone has an i.m.). The lettering is Gothic, with top-barred A, closed C and E, round M, N, and H, unless otherwise stated. The mint is Edinburgh, unless otherwise stated. Weights are given in grains, at ends of lines. Coins illustrated on the Plate are marked *.

For matched dies, reference is made to a Burns's figure where possible, and otherwise preferably to another NMAS coin, without attempting to give the number of recorded occurrences.

For fleur-de-lis groats of the first two varieties (better called groups) a shorthand notation has been introduced for the commoner positions of the ornaments (mainly I, lis, points or saltires):-

Obverses - /neck, shoulders/left, right of neck/right of head or crown/.

Reverses - /centre of cross/left, right of lis in 1st qtr./ditto in 3rd qtr./ between pellets (in 2nd and 4th qtrs.)/.

For crown groats, die comparisons for Edinburgh mint include thirty-six specimens in the Coats collection, eighty-five others in NMAS, and 119 PM ones. Most details of the reverse inscriptions have been omitted, as they are generally inadequate to identify the die, in spite of the great variety of stops and position of contraction marks, particularly on the later dies.

DAVID II

1. Heavy coinage groat, S. class D1. Ornamental A in DAVID, plain A in VILLA. Badly clipped. 44.37
2. Light coinage groat. Obv. legend largely lost by clipping, rest almost illegible, but D at 2-3 o'clock rules out Robert II. Head set far back, a late feature.
Rev. has plain A in VILLA. 36.77
3. Half-groat (heavy coinage ?). Very worn and clipped.
Obv. almost illegible, nothing in spandrels.
Rev. has ornamental A in VILLA. 19.53

ROBERT II

4. Groat. Normal, cf. B 310 (class I B2, in unpublished Murray classification). Clipped. 40.86

ROBERT III

5. Heavy coinage groat, first issue. 41.50

JAMES I Fleur-de-lis groats, first variety

Standard legends +IACOBVS(lis)DEI(lis)TRACIA(lis)REX(lis)SCOTOR
 +DNS(lis)P | TECOTOR | MS&LI(lis) | BATORM
 VILL | A(lis)ED(lis) | INBV | (lis)RGH

(where & represents crossed I for ET).

Lettering. The earlier specimens have small plain A, small G, ornamental I, L: C, D with sharp indented ends. Changes which are noted apply for all following coins.

6. Obv. die B 425, i.e. starts \ddot{x} , reads RE \ddot{x} ; /, xx/, I//; 8 arcs.
 Rev. reads P \ddot{x} | \ddot{x} TECTOR \ddot{x} |ATORMS|ATORMS; VILL \ddot{x} with plain L; no ornaments. 30.35
7. Obv.¹⁷ ends SCOTO \ddot{x} ; /, xx/I, I/x r. of crown and of hair/; 7 arcs.
 Rev. only +DNS(lis)Px legible of outer legend; lis after RGH;
 /// \ddot{x} , x/. . 26.54
8. B 432A (=R Add. 136).
 Obv. reads GRACIA, ends SCOTO(lis); /, xx/I, I/x/; 7 arcs.
 Rev. saltires at end of inscription in all qtrs. except after BATORM;
 //, x/x, x/. . 30.02
9. R 4. Large G.
 Obv. reads as no.8; /, xx/I (and I l. of sceptre), x//; 7 arcs.
 Rev. additional saltire stops, reading Px| \ddot{x} TEC, L \ddot{x} I \ddot{x} ; double saltires after ED and RGH: //?//. 30.61
10. Obv. somewhat double-struck, reads (TRACIA), SCOTOR; /, xx/I, I//;
 7 arcs. C, D with projecting ends.
 Rev. with chainwork circles. Double saltires after P and RGH, single after LI(lis), BATORM and VILL: /// \ddot{x} , x/. (2nd qtr. only)/ also x in 4th qtr. 34.08
11. Small lis stops.
 Obv. has small indented A, but normal S. Reads +:IC, SCOTOR (3 lis); //lis, xx//lis, I//, I on sceptre handle, 3 points nearly in vertical line l. of sceptre; 8 arcs.
 Rev. small indented A, large S. Reads ED+ and RGH \ddot{x} ; //., /., x/. . 37.49
- 12* Same obv. die as last.
 Rev. has large S, reads P+, + at end; RGH \ddot{x} ; //., /., x/. . 25.71
13. Small lis stops. Small indented A, large S.
 Obv. IC (as also 14-18), SCOTOR(lis)+; /lis, ?/lis, I/x/; 8 arcs.
 Rev. reads RGH (lis above x); /lis/., /x., /./. 38.18
14. Obv. die B 450. Small indented A, large S, small lis stops, no stop after DEI, lis at end; /lis, ++/I on sceptre handle, I/x/; 8 arcs.
 Rev. large indented A(?), normal S, T's illegible, normal-sized stops.
 Reads C for D in ED, ends RGH \ddot{x} ; //., /., x/. / . 25.40
15. Same obv. die as last.
 Rev. large indented A, normal S, normal-sized lis stops. Reads BV \ddot{x} |(lis)RGH \ddot{x} ; /lis/., /., x/. . 28.29

- 16*, 17. Large indented A and X, lob-stemmed T, normal-sized lis stops. Die duplicates.
 Obv. has lis at end of legend; /lis, xx/ lis,I//; 8 arcs.
 Rev. reads LIx, RGH[†]; //.,/x,./. . 32.33, 26.53
18. Obv. die B 460A (=R 15). /lis, xx/ x,I//; 8 arcs.
 Rev. no additional stops, unless after P; /lis /.,/.,x./. . 32.43
- JAMES I (or II) Fleur-de-lis groat, second/first variety
- 19* Obv. ends SCOT (?), x after DEI; /lis, xx/, x//, probably I on sceptre handle; 7 arcs.
 Rev. die B 490, late first variety with wedge-stemmed T, large L; /lis///. . 31.82
- JAMES II Fleur-de-lis groats, third variety
 Standard readings GRACIA, TECTOR | MS&LI | BERATO. No ornaments.
 II for N.
- 20* Obv. die B 505. Double annulet stops, reads SCOTO(RV⁰); 8 arcs.
 Rev. reads LoI, (lis)VIL|LAED|INBV|oRGH(lis)⁰. Lis in qtrs. is from a different punch from B505. 35.92
- 21* Obv. die B 500. Stops are 4 points, colon-wise (but printed as quatre-foil in Burns). Reads IACOVS, GRACA, SCOTORV; 8 arcs.
 Rev. Outer i.m. is a crown with high-arched base, as on B 500, and as before VIL on a Stirling groat, B503B. Reads DNS⁰P and LIB|ERATOR, +VIL; no other stops. 33.33
22. Stirling mint. B 503B (=R 3). Double annulet stops.
 Obv. reads REXSCOT⁰: 8 arcs.
 Rev. has stops after TECTOR, MS and &: the crown i.m. is not clear on this specimen. Clipped. 25.40
- JAMES II Fleur-de-lis groat, fourth variety
23. B 514. Large chip missing. 24.94
- JAMES II Crown coinage
- First issue
24. Gold lion, B 519. Double-struck, but the identification is certain. 51.93
25. Obv. die B 516.
 Unrecorded rev. die, outer legend starts in 3rd qtr.; crowns 1,3. Chipped. 43.04
26. B 4, same obv. die as last. Outer legend starts in 4th qtr.; crowns 2,4. 50.69
27. R 5, same obv. die as last. Outer legend starts in 4th qtr.; crowns 1,3. 50.49
28. PM 9, same obv. die as last. Outer legend starts in 4th qtr.; crowns 2,4. 52.63
29. Obv. die B 517.
 Rev. die recorded for BM; outer legend starts in 3rd qtr.; crowns 1,3. Two small chips. 52.38

Second issue groats Here open C is used.

Dr Stewart's classification has been slightly extended.

For S. class II reverses (which normally have crowns 1,3 and annulets between the pellets):-

- IIa With PRO in full, as normal in I.
- IIb Pro abbreviated to P preceded by a crescent, as also in III.
- For S, class III (for which crowns 2,4, normally):-
- IIIa All with C reversed for D, sometimes with a line added to close it; unbroken E. Normally saltires by neck, and between pellets.
- IIIb Broken E, generally a normal D. Various ornaments.
30. I, obv. die B 521, 522.
Rev. die otherwise recorded only for a IIIb/I mule, with the late 2-lis obv. die, as 53 below. Double star stops on either side of abbreviated ET; crowns 2,4; nothing between pellets. 52.36
- 31* Same obv. die as last.
Unrecorded rev. die, similar but crowns 1,3. Corroded, perhaps weight loss in cleaning. 45.02
- 32* IIa/I. Obv. die reads GRASIA, lis l. of crown. Two coins from this die in BM.
Rev. die unrecorded; annulets between pellets; crowns 2,4. 51.81
- 33-35. IIa, PM 23 - obv. die B 532, lis r. of crown.
Rev. with D of DNS punched over crown i.m., annulets between pellets, crowns 1,3. Small chip out of 35. 54.55, 50.01, 49.97
36. Same obv. die as last three.
Unrecorded rev. die, ends MS^x, rev. qtrs. as last. 50.76
37. IIb, P 34 - obv. die B 531, lis l. of head 53.04
38. IIb, PM 52 - obv. die B 19a, 19b. Large chip. 46.20
39. IIb, Obv. die B 533. Unrecorded rev. die. 50.87
40. IIb, PM 71 - obv. die B 22a, cross on neck and each side.
Rev. die B 534, with C reversed for D. 53.55
41. IIIa/IIb. Obv. die B 539, 540.
Rev. die B 19b (=R Add. 158). 42.27
42. IIIa/IIb. Obv. die B 542.
Rev. probably an unrecorded die (somewhat double-struck). 52.79
43. IIIa, B 542. Large chip. 43.35
44. IIIa, PM 86, 87 - obv. die B 26. 55.20
45. IIIa, obv. die B 541 (which is of Aberdeen mint).
Rev. die recorded only with the other obv. die used at Aberdeen. 55.83
46. IIIa, same obv. die as last. Duplicate in BM. 51.67
47. IIIb, obv. die B 543, with C reversed (for D) over C, × by neck.
Unrecorded rev. die, with normal D, × between pellets. 48.14
- 48* IIIb/IIb - first such coin recorded for this obv. die, B 550, with trefoils by neck.
Rev. is a normal IIb die, recorded for a homogeneous coin (and also with a different IIIb obv., in BM). Small chip. 53.05
49. IIIb, PM 115, also BM - same obv. die as last.
Rev. with × between pellets. 54.78
50. IIIb, P 48 - obv. die B 547A, cross i.m., ends with four saltires diamond-wise. Nothing between pellets. 51.93

- 51, 52*¹⁶ IIIb, Rhoneston 9 - obv. die B 548, 549, used also at Roxburgh and Perth. 51 shows an early state of the die flaw, which is fully developed on 52.
Rev. reads LIBR. 52.07, 50.02
- 53* IIIb, P 63 - obv. die with lis above crown and r. of crown, x by neck.
Rev. IIIb, nothing between pellets. (This obv. die was also used with several much earlier rev. dies, e.g. that of 30, above.) 50.06
54. Stirling mint. IIIa, B 540A (=R 19) - obv. has a large crown, double annulet stops after SCOTORV, lis by neck.
Rev. has nothing between pellets, crowns 2,4. Small E on both dies. 51.46
55. Aberdeen mint. IIIa, R 20 - obv. die B 541, same as 45, 46. 54.74
56. Perth mint. IIIb, same as an NMAS coin purchased 1965.
Obv. die R 22 fig. 66, used also at Roxburgh and Edinburgh.
Rev. die B 41a, with x between pellets. Cracked. 52.60

Half-groat

- 57* II, obv. die B 551, 552 - made early in class II, with small B.
Rev. die late II, with C reversed for D and broken G. 26.87

JAMES III Mullet issues

S. group I groats

- 58-62. 1a, B 561 40.55, 40.29, 40.22, 39.66, 38.78
63. 1b, B 567 (S. fig. 102). 40.06
64. 1b, R 3 (B 567/B 568). 40.29
65-67. 1c. B 568 40.33, 40.09, 38.81
68. 1c, B 569. Reads LIBER with E reversed. 38.14
69. Berwick mint. 1c, B 5a (=R 4). Same obv. die as last. 37.78

S. group III groats

70. IIIa (i.e. crown of 5 lis), B 15 (S. fig. 104). Small head.
Mullets 1,3. 40.29
71. IIIa, R 19 (B 588/B 592). Same obv. die as last. Mullets 1,3. 38.14
72.¹⁹ IIIb, B 18, R 22. Early stage of obv. die flaw.
Rev. reads TETOR^x (B 17, from same rev. die, was read as TECTOR^x, due to double-striking); mullets 2,4. 38.36
73-75. IIIb, B 591. Showing the fully-developed flaw. This rev. die was used also for 77-79 (mules). 39.02, 38.28, 38.03
76. Berwick mint. IIIb, B 593. Same obv. die as last, in same state of die flaw. 36.92

S. group IV groats

(The dies are given first, named according to the analysis below)

- 77, 78*, 79. 1/a (IV/III mules). No.78 shows an obv. die crack parallel to the circles, near . after GRA, which is not visible on 77, 79-84. 38.25, 37.80, 37.42
80, 81. 1/b. 37.64, 34.07 (but apparently a full coin)

82, 83.	1/c.	38.66, 37.17
84*	1/d.	39.88
85.	2/c.	36.53
86.	2/d.	36.12
87, 88.	3/c.	37.09, 35.12 (perhaps both clipped)
89, 90.	3/f.	40.63, 37.57 (perhaps clipped)
91, 92.	3/g.	38.46, 37.36
93-97.	4/h.	39.77, 39.29, 38.28, 37.63, 37.01
98, 99.	4/i.	39.24, 38.93

S. group IV pennies

Standard legends + IACOBVS^XDEI^XGRA^XREX ... ; + VIL|LA^XE|DEIN|BOVR

100.	Large head, full curly G. Obv. reads DE for Dei, and ends REX ^X SO. As B 609, same obv. die, but probably different rev. die, mullets 1,3. Buckled.	7.95
101.	Small head, different G. Obv. ends REXS: Obv. die B 610; probably rev. die too, mullets 1,3.	6.82
102.	Obv. as 101. Obv. die B 611; rev. die probably B 610, mullets 1,3.	10.24
103.	B 611, mullets 2,4.	10.89
104*	Obv. ends REX, crown tilted down on dexter side (a die otherwise recorded only from R.C.Lockett's collection). Rev. die probably the same as 100.	8.97

105*	Same obv. die as last. Rev. die altered from one for billon pennies, with smaller inner circle and reading VIL LA ^X ED INB ^X VRGH. Three pellets in all qtrs., but mullet over-punched in first qtr. and perhaps third.	8.84
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JAMES III(?) Crux Pellit copper pennies

Probably both are S. class III (under Ecclesiastical Coinages), i.e. rosette
on centre of obverse. Both very corroded.

106.	Illegible, chipped (?).	15.87
107.	Cf. S. fig. 99. Obv. almost illegible. Rev. with annulets in spandrels; ()VXOP()IE ^o CR() can just be made out.	15.78

Die analysis of James III groats of S. group IV

The standard legend is given, and the variations for each die.

Obverse dies

+ IACOBVS DEI GRA REX SCOTORM

No.	Stops	Arcs in treasure	Trefoils on cusps by shoulders	Examples
1	— — — . — —	7	Yes	(1/a) B 604
2	. — . — . — —	8	No	(2/d) B 606
3	: — : — . — —	7	No	(3/c) S fig 105
4	— — — — . — —	7	Yes	(4/h) B 605

(The stop on the last die could not be read on B 605, but the reading was corrected in the Rhoneston hoard report.)

Reverse dies (Position of mullets is given by legendary quarters)

	DNS PT ECTOR M S Z LIBEA TVR MS VILL A EDE NBE O VRGE	Mullets	No. of recorded cases of die-combinations					Obv.
			Rev.	1	2	3	4	
a	(Group III die, 6-pointed mullets)	(2,4)	a	5	-	-	-	
b	Standard	1,3	b	7	-	-	-	
c	Standard	2,4	c	5	1	5	-	
d	ES Z LIBE ATVRER (perhaps IER)	1,3	d	1	5	2	-	
e	TVR MES	.1,3	e	3	7	-	-	
f	As e	1,3	f	-	-	11	-	
g	As e	2,4	g	-	-	3	-	
h	ES Z LIBE ATVR M	1,3	h	-	-	-	12	
i	ES Z LIBE ATVR MS	1,3	i	-	-	-	5	
		Totals		21	13	21	17	72

Notes

Die f has the mullet in third quarter double-punched. Dies e,f can also be distinguished by position of final E of inner legend. On e, its entire front touches the arm of the cross, but on f, only the base touches. Die d has the second E of Edenbeourge punched over what is either D or reversed E. The pattern of die-links suggests that minting was in two periods, with a break before the use of obverse die 4.

Examples in museums, and the Innerwick hoard

Abbreviations as above, and also:

- I Innerwick hoard
- A Ashmolean Museum

Additionally, the count includes R.C.Lockett coins (from the complete photographs), and two other private collections.

- 1/a. I 77-79, B 21, P 76
- 1/b. I 80-81, B 24, R 25, BM, +2
- 1/c. I 82-83, P 80-81, +1
- 1/d. I 84
- 1/e. R 26, BM(2)

- 2/c. I 85
 2/d. I 86, B 26, P 85, BM, +1
 2/e. B 27, R 28, P 86, A, +3
 3/c. I 87-88, P 82-83, BM (S fig 105)
 3/d. B 25, A
 3/f. I 89-90, P 84, BM(5), +3
 3/g. I 91-92, BM
 4/h. I 93-97, B 23, R 27, P 78, NMAS (Rhoneston 24), BM, +2
 4/i. I 98-99, P 79, BM, A

The English and Irish content

The English and Irish coins contained in the Innerwick hoard totalled 152, of which one was a forgery. There was a preponderance of groats (108) over half groats (forty-three), and just one penny. The mints were mainly London and Calais but York, Coventry, Durham, Dublin and Trim were sparsely represented.

The earliest coin dates from c.1352 in the fourth coinage pre-treaty period of Edward III, but judging by the condition of this and others of his reign (forty-one in all) they had been in circulation for some considerable time before being deposited. There was only one coin from each of the treaty and post-treaty periods and none at all for the following reigns of Richard II and Henry IV.

Henry V was represented by eight coins and a fragment, but by far the largest number came from the reign of Henry VI. These totalled eighty-six and of these sixty-five were minted in Calais. All are from his first reign and eight out of a possible twelve issues are represented. In addition the one forgery came from this reign. It purported to be a London groat and judging by the lettering this was made during the second reign.

Edward IV's coins numbered fifteen only, some from each reign, and were the latest English in the hoard. The date of the last ones to be deposited is c.1473-76 which gives a spread of well over a hundred years for the hoard.

The classification for Edward III is taken from L.A.Lawrence, 'The Coinage of Edward III from 1351', NC 1926, 1929, 1932, 1933; for Henry VI from C.A.Whitton, 'The Heavy Coinage of Henry VI', BNJ 23 (1938-40); and for Edward IV from C.E.Blunt and C.A.Whitton, 'The Coinages of Edward IV and Henry VI (Restored)', BNJ 25 (1945-48).

Edward III

Type of Issue	Mint	No.	Weights in gr.
Groats			
108.	B/C mule	London	1 55.66
109-14.	C	London	6 52.58, 52.18, 52.07, 49.86, 49.26, 47.98
115.	D/C mule	London	1 57.04
116-17.	D	London	2 55.81 (FRANE for FRANC), 50.39
118-23.	E	London	6 57.52, 57.48 (Lis on breast), 57.27 (Pellet in S of TAS), 54.24, 51.88, 49.48 (LOMDOM)
124.	E	York	1 44.91
125.	E/F mule	London	1 57.40

Half-groats

126-36.	C	London	11	29.75, 29.46, 24.68, 24.64, 23.30, 22.91, 21.88, 21.69, 21.68, 20.13, 19.85
137-40.	D	London	4	25.06, 23.57, 21.47, 21.36 (FRAG)
141-42.	E	London	2	26.43, 19.41
143-45.	E	York	3	24.23, 23.47, 23.99
146.	F/G mule	London	1	32.08
147.	Treaty	London	1	23.92
148.	Post-treaty	London	1	23.96

Henry V

Type of Issue	Mint	No.	Weights in gr.
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Groats

149-53.	Mullet on right shoulder	London	5	57.81, 57.34, 56.89, 56.07, 49.15
154.	(A fragment which appears from the lettering to come from a groat of this reign.)			

Half-groats

155.	Mullet in centre of breast	London	1	27.43
156-57.	(Unclear)	London	2	21.00, 18.39

Henry VI

Type of Issue	Mint	No.	Weights in gr.
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Groats

158-64.	Annulet	London	7	57.97, 57.75, 57.24, 56.53, 54.83, 52.01, 51.24
165-203.	Annulet	Calais	39	58.98, 58.79, 58.76 (rev. D over E in ADIT), 58.45, 57.98, 57.70, 57.68, 57.62, 57.57, 57.23, 56.81, 56.74, 56.74, 56.72, 56.63, 56.55, 56.14, 56.13, 56.08, 55.91, 53.91, 52.26, 51.86, 49.63, 49.61, 49.44, 49.29, 48.79, 48.61, 48.02, 47.80, 47.66, 47.63, 47.28, 46.87, 46.76, 45.47, 43.04, 41.50
204.	Annulet Sub-issue	Calais	1	50.33
205-12.	Rosette Muscle	Calais	8	58.65, 58.40 (2), 57.84, 57.24, 56.81, 56.70, 54.47
213-14.	Pinecone Muscle	Calais	2	59.13, 56.46
215-16.	Pinecone Muscle	London	2	56.65, 50.19
217.	Leaf Muscle/ Leaf Trefoil mule	London	1	57.17
218.	Leaf Trefoil	London	1	58.91
219.	Trefoil	London	1	58.69
220.	Trefoil	Calais	1	56.51
221-24.	Leaf Pellet	London	4	59.13, 46.51, 46.23, 44.70
225-26.	Cross Pellet	London	2	55.19, 48.09
227.	(Forgery)	London	1	41.80 (Crude bust and lettering. Type of lettering suggests 2nd reign.)

Half-groats

228-38.	Annulet	Calais	11	28.66, 27.93, 27.92, 27.59, 26.31, 24.92, 24.91, 24.47, 23.43, 23.27, 22.54
239-41.	Annulet	London	3	27.72, 25.64, 25.47
242.	Rosette Muscle	Calais	1	26.93
243.	Pinecone Muscle	Calais	1	26.32
244.	Leaf Muscle	Calais	1	27.35

Edward IV

1st Reign

Type	Mint	No.	Weights in gr.
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Heavy Coinage Groats

245.	Ic	London	1	59.11
246.	II	London	1	57.26

Light Coinage Groats

247.	Va (2)	London	1	46.95
248.	Vc (3)	London	1	46.33 (pellet under CIVI)
249.	VI	York	1	47.97 (E on breast double struck)
250.	VI (2)	Coventry	1	36.32
251-52.	VII (1)	London	2	47.90, 43.15

2nd Reign

Groats

253.	XIV/? mule	London	1	47.16. This is an interesting coin. The rev. bears a rose-like mintmark which is not known for groats although a rose appears on the rev. of half-groats of type XIII, XIV mules, and XV, all very rare. Unfortunately, the mark on this coin is not sufficiently clear to be accepted with certainty.
254.	XIV	London	1	45.36

Ireland - groats

255-57.	Cross and Pellets	Dublin	3	42.95, 42.20, 40.28
258.		Trim	1	35.23

Penny

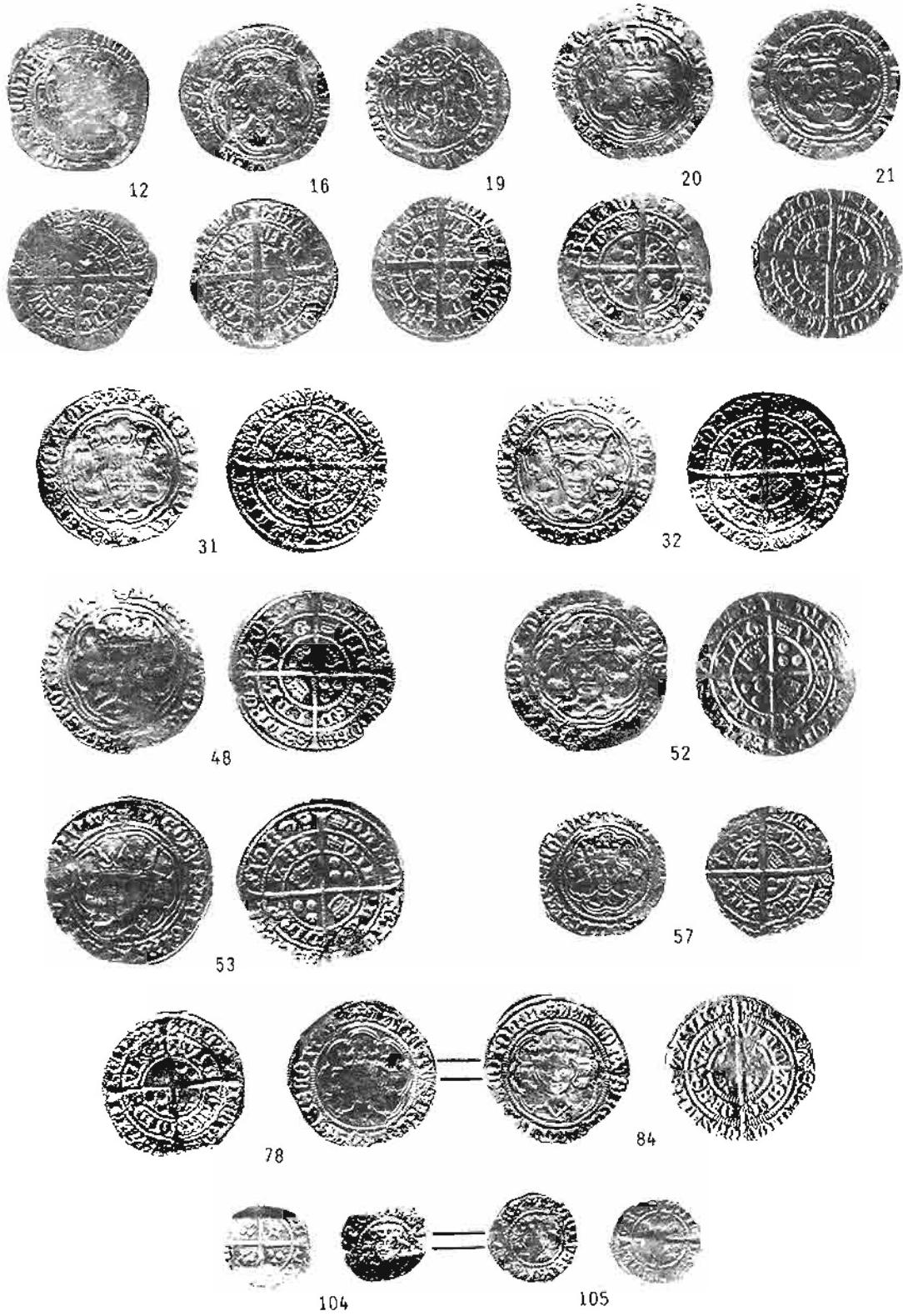
259.	Bishop Lawrence Durham Booth		1	10.22
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NOTES

1. Dr Caldwell, of the National Museum of Antiquities of Scotland, has been in charge of the Museum's work on the hoard, and has written the first section of this report. While himself doing a good deal of identification, including some of the die-matching of Scottish coins, he enlisted the help of Mrs Delmé-Radcliffe, who is responsible for the final identification and listing of the English coins, and Mrs Murray who is responsible for the remainder of this report.
2. For 1485, *The Acts of the Lords of Council in Civil Causes (Acta Dominorum Concilii) 1478-1495* (1839. Hereafter cited as *ADC*), 94* - 'Inglis grotis', 'Inglis Eduard grotis' (light), 'Scottis crounis of gold'. Here and elsewhere the year has been modernised for dates before 25 March. For 1467, R.W.Cochran-Patrick, *Records of the Coinage of Scotland* (Edinburgh, 1876. Hereafter cited as *C-P, Records*), I, 32, from *The Acts of the Parliaments of Scotland*, II (hereafter cited as *APS*), 88,
3. Classification is according to I.H.Stewart, *The Scottish Coinage* (London, 1955).
4. *C-P, Records*, 39, from *APS*, 166, c.10.
5. The hoard references are given in note 12, below.
6. *C-P, Records*, 49, from *APS*, 233, c.10.
7. *Register of the Great Seal of Scotland. Registrum Magni Sigilli Regum Scotorum* II, no.2883; *ADC*, 406 (quoting a letter of tack dated 1473).
8. *ADC*, 414; *Register of the Privy Seal of Scotland. Registrum Secreti Sigilli Regum Scotorum*, I (cited as *RSS*), no.82.
9. *ADC*, 46 (George Hume of Thurston mentioned, as a third party); *APS*, 128.
10. *ADC*, 330; *RSS*, no.161.
11. *Rotuli Scaccarii Regum Scotorum. The Exchequer Rolls of Scotland*, X, 125 shows that he already had this custody in the year from August 1488, although his letter of gift under the privy seal was dated May 1491. *Acts of the Lords of Council in Civil Causes* (1918), II, 12.
12. The original hoard reports have been used, but numbers in J.D.A. Thompson, *Inventory of British Coin Hoards A.D.600-1500* (Oxford, 1956) are also given as reference, if available. Ayr (Inv. 20), *Proceedings of the Society of Antiquaries of Scotland* (hereafter cited as *PSAS*), 5 (1863), 105 ff.: the attribution of coins to James III, IV and V has been corrected, and in particular those of Lindsay's 6th coinage of James III, i.e. of crown-and-lis type, are now transferred to James IV. Kilkerran (Inv. 208), *PSAS* 28 (1893-94), 275 ff. Perth (Inv. 309), *NC* (1921), 294 ff. and *PSAS* 55 (1920-21). Whitburn, *PSAS* 56 (1921-22), 321-4, also summary in *NC* (1967), 148-9. Glenluce, *BNJ* 29 (1959), 362-81. Rhoneston, *BNJ* 34 (1965), 109-17.
13. Bridge of Don (Aberdeen No.5, Inv. 5), deposit date c.1466. New Cumnock, Ayrshire (Inv. 284), *terminus post quem* provided by an Edward IV heavy groat. Crookston, Renfrewshire (Inv. 107), t.p.q. provided by a few coins of Edward IV. Leith; N.M.McQ.Holmes, *Weill Wrocht & Cunyeit: The Edinburgh Mint and its Coinage* (City of Edinburgh Museums and Art Galleries, 1982), and full report forthcoming.

14. C-P, *Records*, 41, from *APS*, 174, c.1 - calling in the new placks, the mint to pay 2d. for all placks, as bullion, up to the end of May (1486). The devaluation of the old placks, perhaps from 6d. to 4d., was presumably at about the same time, and certainly within the period 21 July 1485 to 27 July 1486; *Exch. Rolls IX*, 445.
15. J.E.L.Murray, 'The Black Money of James III...', in *Coinage in Medieval Scotland (1100-1600)*, edited by D.M.Metcalf (British Archaeological Reports, 45, 1977).
16. From 1855 to 1919, what was considered to be the most probable attribution for these pieces was to James de Bourbon, consort of Joanna II of Naples, who was proclaimed king in August 1415 and defeated in November 1416: this is still accepted by some numismatists. Mr R.B.K. Stevenson, who revived the attribution to Bishop Kennedy of St Andrews, has told me that he has long realised that some, at least, of these coins must be later than 1465, when Kennedy died.
17. Here, and for nos.10-15, the obverse reading has been supplemented from coins in a private collection.
18. Nos. 51, 52 and 56 (and probably 53) were struck under James III. The die flaw to right of hair, on 51 and 52 is not found on Roxburgh coins, and James II was killed at the siege of Roxburgh castle.
19. S. IIIb has crown of 3 lis. Nos.72-76 are all from the same obv. die, B 590-593. An I-shaped flaw developed, crossing the inner circle and touching the final M.

PLATE



THE CROMWELL FUNERAL MEDAL BY SIMON

Marvin Lessen

Introduction

Thomas Simon's final medallic work depicting Oliver Cromwell was, fittingly, the struck gold funeral or death medal dated 1658 (E.Hawkins, *Medallic Illustrations* 433/82). Henfrey¹ has already presented most of the available material, and thus my ideas and conclusions follow his closely, but I believe there is value in expanding the coverage by means of this article. A discussion of the commercial Dutch copies (Hawkins, 434/84 and 435/85, the small and large round medals, from a total of seven dies) is reserved for a future paper on the various seventeenth-century Dutch Cromwell medals.

The Medal and Dies

The obverse of this small oval medal has Cromwell's laureate, armoured bust left, signed on the shoulder truncation T.SIMON, and the legend with his normal protectoral titles. On the reverse is a young olive tree, the stump of an old one, and shepherds with their flocks. The legend NON.DEFICIENT. OLIVA.SEP.3.1658 was translated by Hawkins as 'the people shall not lack an olive tree,' alluding to Richard Cromwell's succession. One of the psalms of David includes the phrase 'a godly man shall be like an olive tree'. So the olive tree in conjunction with Cromwell's name was a fitting motif for the time, if not exactly a pun.

There has never been any written implication or a tradition that the dies might have survived Simon, and there is no reason to believe that they may have survived, for there are no restrikes. One or both dies probably had engraved cuts for a suspension loop as most of the medals have a loop integral to the flan. The dies likely followed the normal pattern for a Simon oval medal, such as that for the Lord General medal, viz. steel shouldered dies having a round die face on a square shank, the design being within an oval outline on the round face.² All the medals examined have been struck from the same pair of dies.

Documentation

Cromwell died on 3 September 1658, and his state funeral was held on 23 November 1658, although the actual body was apparently interred long before then. If the medals were intended to be ready for the occasion it appears that Simon had sufficient time to prepare the dies. Who authorized and paid for the work, when the medals were struck, or to whom they were given remains unknown from any written records. The lack of documentation means that I have found nothing specific in the *Calendars*,³ *Commons Journals* (in fact the Commons Journals were not printed for the period between 6 February 1658 and 27 January 1659), or Simon's invoices. Two brief warrants by Richard Cromwell requesting payment for some of the funeral expenses do not

mention medals.⁴ The earliest illustration of the Simon medal, and also the first appearance of the smaller Dutch copy, was in the first edition of van Loon (1723). The large Dutch copy was the first of all to be illustrated, and that by Raguenet in 1691, copied by Leti in 1692, and then by Evelyn in 1697.⁵

The Funeral

The press report of the funeral⁶ does not list individuals, but does mention the important attendants: 'ten of the gentlemen of his Highness' carried the hearse with the effigies; 'six other gentlemen of his Highness' put a canopy over the hearse before it was placed on the carriage; 'a gentleman of his Highness's Bedchamber' sat at each end of the carriage; the pall extending on each side of the carriage was 'borne by persons of honor, appointed for that purpose'; a 'Knight Marshall on horseback attended by his deputy and thirteen men on horseback'; on each side of the carriage the 'banner-roles were carried by twelve persons of honor'; and the armour was 'borne by eight army officers.' Then came the numerous mourners, from ambassadors to servants, amongst whom presumably the chief was Richard Walpole wrote that Thomas Simon was one of those who walked in the procession.'

In this most elaborate, expensive, and oft-postponed funeral, modelled after that of James I, there were obviously quite a number of people who could have received a medal, but whether any actually did is at present unknown.

Original Medals

From my studies and gathering of data it is evident that all genuine Simon medals are struck and, conversely, all struck medals are genuine and contemporary. If Nos. 1 and 2, in copper and lead, are categorized as die trials, it seems likely that only gold medals were issued, at a nominal weight of about ninety-five grains. There were probably no associated chains. I have never encountered a struck silver specimen, and those that have been advertised or listed from time to time have been casts. The following corpus represents all the original (struck) medals that I have been able to record, either from personal knowledge or from sale catalogue listings. The first six medals in the list are struck Simon originals, whose present locations are known. The last eight entries are gold medals, which I assume to be Simon strikings, even though they are not illustrated in the sale catalogues. I base this premise on their descriptions, prices, and references. It is unfortunate that not one of these eight can be definitely linked to Nos. 3-6, although in my opinion Nos. 3-6 are probably included among them. I estimate that there are only about four to six Simon gold medals now in existence, in addition to the two die trials in copper and lead. The key to the plates provides further details on the five illustrated examples. Once again it is evident that original Simon/Cromwell medals are poorly represented in the major public collections, outside the British Museum.

1. Copper, British Museum (Pl. 1,4).
2. Lead, British Museum (Pl. 1,5). Others reported in lead are probably casts, such as that at the University of Leyden (Henfrey noted it as a bad copy), Sotheby 25 March 1874 (lot 34) in pewter (Henfrey noted that it was corroded and rubbed), and one in the Ashmolean Museum, Oxford, which is poor.
3. Gold, Lessen collection (Pl. 1,1), ex Morrison.

4. Gold, Hunter collection, University of Glasgow, 98.04gr., from William Hunter.
5. Gold, British Museum (Pl.1,2), ex Edward Hawkins.
6. Gold, O.F.Parsons collection (Pl.1,3), ex Murdoch, etc.
7. Gold, Hans Sloane collection, reported by Vertue.
8. Gold, Richard Mead sale 18 February 1755 (lot 45), 100gr., sold to Mr Waye for £1.19s.
9. Gold, James West sale 1773 (lot 62), sold to Snelling for £15, undoubtedly ex Earl of Oxford sale March 1741 (lot 160), 99gr., sold to West for £7.
10. Gold, Thomas Thomas sale 27 February 1844 (lot 465), 96gr., sold to Cureton for £5.2s.6d; Baron Bolland sale 21 April 1841 (lot 534) £10.11s. to Thomas (Bolland lot 535 sold to Nugent for £2.13s.10d. was, I feel, a Dutch medal); A.Edmonds sale 25 March 1834 (lot 125) £16; M.M.Sykes sale 8 March 1824 (lot 278) £19.5s.; S.Tyssen sale 23 May 1802 (lot 2868) £15.15s. Or this Thomas pedigree might be simply the Hollis specimen, which also went to Thomas; see the next entry.
11. Gold, Thomas Thomas sale 28 February 1844 (lot 563) sold to Till for £5.2s.6d.; Thomas Hollis sale 1817 (lot 488) £20.10s. Or this Thomas pedigree might be the Bolland, etc. specimen, which also went to Hollis; see the previous entry.
12. Gold, British Museum duplicates sale, Sotheby 10 February 1876 (lot 30) with loop, sold to Rollin & Feuardent for £3.5s.; ex Edward Hawkins.
13. Gold, British Museum duplicates sale, Sotheby 9 April 1878 (lot 155), 94gr. with loop, sold to Henfrey for £4.10s., ex Bank of England collection.
14. Gold, H.Montagu sale 24 May 1897 (lot 254), perhaps the later Murdoch specimen.

Cast Copies

The various cast copies are interesting. Some have very sharp features, some are tooled concoctions, and some are poorly made. The cast criteria are not the result of laboratory testing, such as the use of x-ray diffraction, but rather by simple visual and microscopic examination, looking for such characteristics as blurred designs and letters, metal blobs, and pits. The uniface iron example (Pl.1,6) is quite sharp, and one must admit that there is no background experience for examining an iron coin or medal for its manufacturing techniques. The two signed silver casts (Pl.2,7 and 8) are direct mould copies from original specimens, but the results differ from each other. The former is a fine sharp specimen, albeit with a cracked flan, and the latter is a weak specimen. The silver copies denoted as being by 'Stuart' (Pl.2,9,10,11) are very well made, undoubtedly casts from originals, for the style and details are those of Simon's work, and then heavily tooled or chased and polished. The Simon signature has disappeared. These three are enough alike to have originated from the same hand. The two gold casts (Pl.2,12 and 13) are not sharp examples, and they are very similar to each other. They would have been direct mould copies from an original medal. Finally, there are two gold shells (Pl.2,14 and 15). The first is an obverse only, and the second is a hollow joined obverse and reverse. These must be from the same hand, but it is not known how or why they were made. Possibly they were hammered out over a cast copy for some jewellery purpose. The gold is thin, but rigid, and they do not seem to have been casts. My guess is that most of these various copies were

made in the eighteenth century, but perhaps a few were made in the nineteenth.

Conclusions

In contrast to other Cromwell material the results of physical studies of this medal are simple and non-conflicting, in that the few struck specimens are perfect impressions and must be originals; there are no strange, struck examples, which could have implied restriking, nor are there extant dies; and the casts are of no importance. Also in contrast there is as yet no trace of written material, either contemporary or later, which could shed light on the origin and official nature of the medal. The rarity of the medals precludes the possibility of a general, large distribution, and it is more probable that they were given as gifts to a few selectively honoured individuals in the funeral procession; perhaps they were even instructed to wear them at that time. Alternatively, they could have been produced as official or private treaty commemorative medals to be given to those same people sometime after November 1658.

NOTES

For help, mainly in providing medals for study, I wish to thank Dr R.E. Ockenden (also for review of this paper), O.F.Parsons, R.A.G.Carson and the staff at the British Museum, and E.D.Ainspan (for review).

1. H.W.Henfrey, *Numismata Cromwelliana* (1877), pp.167-69.
2. M.Lessen, 'The Cromwell Lord General Medal by Simon', *BNJ* 49 (1979), 91.
3. In *Calendar of State Papers Domestic 1658-60*, 265, for 25 January 1659 there is an entry from the Council proceedings for £171.17s. paid to Thos.Simons for medals. This could have been a special payment for a specific work such as the funeral medal or just a periodic payment to his account but, if the latter, it does not seem to have been recorded as one of the credits to his major invoice (PRO, Mint 3/16), which has no relation to the funeral medal. So it could in fact be something very separate and distinct, and there is no other medallic work of Simon in that era except the funeral medal to which it could apply. Henfrey, p.219, noted two other general payments to Simon in the Pells Issue Book, No.93, of £200 on 7 December 1658, and £78.5s.8d. on 5 February 1659.
4. Christie's 4 November 1981 (lot 37) for a £1,500 payment of 5 November 1658, and R.Tangye, *The Cromwellian Collection* (1905), p.14 for the same £1,500 of 30 September 1658, this latter document in the Museum of London.
5. G.Van Loon, *Beschryuing der Nederlandsche Historipenningen* (1723), II, 435, for all three medals; F.Raguenet, *Histoire d'Olivier Cromwel* (1691); G.Leti, *Vita di Oliviero Cromvele* (1692) and *La Vie d'Olivier Cromwel* (1694); J.Evelyn, *A Discourse of Medals* (1697).
6. *Mercurius Politicus*, 18-25 November, as published in *Cromwelliana* (1810), p.180, or Henfrey, gives much of the same information.

7. H.Walpole, *Anecdotes of Painting in England (and incidental notes on other arts collected by the late Mr George Vertue)*, fourth edition (1786), II, 286.

KEY TO PLATES

(Photography by the author unless otherwise noted. Scales are not precise).

1. (1x and 2x) Struck original, gold, with loop, 96.2gr., sg 18.9 (approximately), 21.5 x 19.7mm. Lessen collection; NCirc 1970, 156; Alfred Morrison, Christie's 23 July 1965 (lot 5) £75.
2. (2x) Struck original, gold, with loop and ring, 99.8gr., sg 18.9 (approximately). British Museum, ex Edward Hawkins (one of two he donated).
3. (2x) Struck original, gold, with loop, 94.8gr., sg 19.12 (approximately). O.F.Parsons collection, bought Baldwin 5 June 1947; Philip Spence sale, Sotheby 1 April 1947 (lot 350) £22. to Baldwin; Gentleman sale, Sotheby 5 June 1907 (lot 137) £9. to Weight; Murdoch sale, Sotheby 2 June 1904 (lot 154) £18.18s.
4. (2x) Struck original, copper, 45.22gr. British Museum.
5. (2x) Struck original, lead, 49.23gr. British Museum, ex Edward Hawkins.
6. (2x) Cast uniface copy, iron, 26.8gr., sg 7.4. Lessen collection; R.E. Ockenden collection; O. and R.C.Warner collections; Montagu sale, Sotheby 24 May 1897 (lot 257, part) £1.1s.
7. (2x) Cast copy, silver, 49.8gr., 21.4 x 19.9mm. Lessen collection; R.E. Ockenden collection; O. and R.C.Warner collections, bought Baldwin 1949.
8. (2x) Cast copy, silver, 50.6gr., 21.4 x 19.5mm. Lessen collection; R.E. Ockenden collection; O. and R.C.Warner collections, bought Baldwin.
9. (2x) Cast and chased 'Stuart' copy, silver, unsigned, 40.2gr., 21.1 x 19.2mm. Lessen collection; R.E.Ockenden collection; O. and R.C.Warner collections, bought Baldwin 1949.
10. (1x) Cast and chased 'Stuart' copy, silver, unsigned, NCirc 1978, 8427, misnumbered on the plate; Stucker sale, Bourgey 21 November 1977 (lot 70, part). Photo courtesy Spink & Son.
11. (1x) Cast and chased 'Stuart' copy, silver, unsigned. Photo courtesy Cyril Humphris.
12. (1x) Cast copy, gold, with loop and ring. SCMB 1962, M426. £10.10s. but not mentioned as a cast.
13. (2x) Cast copy, gold, with loop, 92.6gr., 21.5 x 19.6mm. Lessen collection; R.E.Ockenden collection; O. and R.C.Warner collections, bought Baldwin.
14. (2x) Copy, gold obverse shell (Hawkins, 434/83). 8.02gr. British Museum, ex Edward Hawkins.
15. (2x) Copy, gold, joined obverse and reverse shells (Hawkins, 434/83 var.), with loop, 49.7gr., 22.5 x 20.7mm. Lessen collection; R.E.Ockenden collection, bought Spink 1947; NCirc 1919, 72239, again February 1905 and October 1902, each time at £10.

PLATE 1



Original Struck Funeral Medals

PLATE 2

10 Silver Cast
Chased (1x)7 Silver
Cast (2x)8 Silver
Cast (2x)9 Silver Cast
Chased (2x)11 Silver Cast
Chased (1x)12 Gold
Cast (1x)13 Gold
Cast (2x)14 Gold Obverse
Shell (2x)15 Gold Shells
Joined (2x)

Funeral Medal Copies, Mainly Casts

SUTLER TO HIS MAJESTY'S GUARD OF FOOT

George Berry

I have long been intrigued by a seventeenth-century token, listed in Williamson under Uncertain 50, which reads,

Obv. *EDWARD•LLOYD•SVTLER•TO•HIS

Rev. *MAIESTIES•GARD•OF•FOOT*

* IL *
E * M
HIS HALF
PENY

A building, probably a barracks, is featured on the obverse.

This token was undoubtedly issued by a sutler supplying food and drink to soldiers of the Royal Regiment of Foot Guards, newly formed in 1665 from an amalgamation of Colonel John Russell's regiment and Lord Wentworth's regiment.¹ Thomas Wentworth's corps, given the designation of His Majesty's Royal Regiment of Foot Guards, was formed from the large numbers of Englishmen who flocked to Charles's standard in Flanders in September 1656. Colonel John Russell was given command of a similar body formed in London during Restoration year, which was also known as the Royal Regiment of Guards or His Majesty's own Regiment of Foot.

The combined body in 1665 first became known as the King's Regiment of Foot Guards, later as the First Regiment of Foot Guards. It was not until 1815 that the term Grenadier Guards was used. The Prince Regent approved the new title, The First or Grenadier Regiment of Foot Guards, to commemorate their defeat of the Grenadiers of the French Imperial Guards at the battle of Waterloo.

It seems clear, therefore, that Edward Lloyd's tokens were struck to be used by his customers, guardsmen, who were the forerunners of the Grenadier Guards. They cannot be associated with the other contemporary royal guards regiment, Monck's regiment of foot, which, after the battle of Dunbar, had its headquarters at Coldstream on the Tweed. After the Restoration this regiment was mustered on Tower Hill and ordered to lay down its arms and moments later to take them up again as the King's Second Regiment of Foot Guards. The men refused to accept their new name, claiming that they were second to none! They were then commanded to take up arms as the Lord General's Regiment of Foot Guards. This was its title between 1661 and 1670. From 1670 onwards the regiment became known officially as the Coldstream Regiment of Foot Guards.

There are several references to men bearing the name Lloyd in the records of His Majesty's Royal Regiment of Foot Guards, but not to Edward Lloyd himself. This is not surprising as sutlers were civilians, belonging

to the rag taggle of camp followers, who supplied soldiers with their varied needs. The word sutler, derived from the Dutch, has been defined as a small vendor, petty tradesman, victualler, soldier's servant. A significant army ordinance of 31 December 1590 reads: 'the Provost Marechal and Sergeant Major of every garrison shall keepe a perfect roll of all such English victuallers called in Dutch sutlers, petty marchants and other loose persons of the English nation'. Shakespeare's Henry V has the line, 'I shall sutler be unto the campe and profits will accrue'. A reference to a sutler attached to a guards regiment is to be found in a London Gazette of 1701, 'Mr Wollaston, sutler at the Horse Guards'.

By the eighteenth century sutlers attached to British regiments had to be licensed. Their stalls must have been a regular feature not only of camp life, but also on the battlefield, as the following army ordinance of 1844 reveals: 'no huts are to be allowed in front of, or between the intervals of the battalions, their proper situation is in the rear of the line of petty sutlers'. It seems too that licensed sutlers were subject to the Mutiny Act.

Although most literary references to the sutler seem to be derogatory, there can be no doubt that he played an important role in the life of a regiment. As Fortescue reminds us,

there was no such thing as an Army Service Corps until the end of the nineteenth century and all the business of transport and supply was done by contract... In that old battleground of the Coldstream, the Low Countries, a contractor could always be found who knew the business thoroughly. But the contractor was concerned only with the bread and fuel. Everything else was a regimental matter conducted by the regimental sutler, which meant more stoppages, more financial regulations and more accounts. Incidentally this arrangement must have been bad for discipline, for the soldier who had to pay for his ration of meat, had great temptation to lay violent hands upon every fowl, pig or sheep that came his way. It is worth while to note that in the regimental sutler lay the germ of the regimental canteen.²

I am informed that to this day small unit locations in Northern Ireland, which would not be a viable proposition for the N.A.A.F.I., employ a sutler, usually a Pakistani, who provides an amazingly high standard canteen service.³

Returning to Edward Lloyd's token I deem it no coincidence that the first quarter-master of the newly formed First Regiment of Foot Guards was a John Lloyd. He was appointed on 15 July 1665. What could be more natural than that he should employ a member of his family in the capacity of regimental sutler? The quarter-master and sutler between them supplied the regiment's needs. Incidentally, John Lloyd was replaced as quarter-master by Thomas Jones on 3 August 1667. John Lloyd was never commissioned, but several members of the Lloyd family were (The First or Grenadier Guards has a long history of family loyalty to the regiment).

APPOINTED

William Lloyd	lieutenant	November 1660
	captain	August 1667
Sir Godfrey Lloyd	captain	May 1666
Charles Lloyd	ensign	July 1667
	lieutenant	September 1673
	captain	November 1681

Thus no less than five members of the Lloyd family served the King's

Regiment of Foot Guards during the period of the token's circulation: Sir Godfrey and William as captains, Charles as ensign, John as quarter-master and Edward in a civilian capacity as sutler.

The token itself is undated, but its style and lettering indicate that it was struck in the 1660s. Morley and Pegg in a recent paper classify similar tokens bearing a pierced cinquefoil mintmark and a cable pattern inner circle as Group K (1665-66).⁴ Such a dating would indicate that it was struck during the earliest years of the newly amalgamated Royal Regiment of Foot Guards, and would exactly coincide with John Lloyd's appointment as quarter-master in July 1665.

NOTES

1. For this and other details of the regiment's history given below see, Sir F.W.Hamilton, *The Origin and History of the First or Grenadier Guards*, 3 vols. (1874, 1877).
2. G.Davies, *The Early History of the Coldstream Guards* with a general introduction by J.W.Fortescue (1924), pp.xxi-xxii.
3. I am indebted to Major (ret.) P.Clifford of the Regimental Headquarters, Coldstream Guards, for this information.
4. P.Preston-Morley and H.Pegg, 'A Revised Survey of the Seventeenth-Century Tokens of Nottinghamshire', *BNJ* 51 (1981), 172.



COPPER v TIN COINS
IN SEVENTEENTH-CENTURY ENGLAND

J. Keith Horsefield

The first time that the Royal Mint produced any quantity of coins in a metal other than gold or silver was in 1672. From then until 1679 it struck half-pence and farthings in copper. When such denominations were next minted, from 1684 to 1692, the metal used was tin. From 1693 to 1701 it was again copper. The reasons for, and the effects of, this alternation of metals are the subjects of this paper.

Copper was not produced in any quantity in Great Britain until about 1690, and when used for coins it was imported from Sweden. Its exploitation in England and Wales had been hampered by an Act of Henry IV 'against the multiplication of gold and silver'.¹ The repeal of this Act early in 1689 included the provision that in future no mine of copper, tin, iron, or lead should be adjudged a royal mine even if gold or silver was extracted from it.² Thereafter 'several new veins of copper ore were discovered and mining operations were prosecuted with vigour'.³ By 1697 production was well under way. English output was estimated by a contemporary at 160 tons, of which half was attributed to William Dockwra's Copper Company and the other half to four other copper producers.⁴ There is some evidence that this may have been an under-estimate, and it is possible that by the end of the seventeenth century British production of copper may actually have approached 300 tons.⁵

This, however, was small compared with the output of tin, which at this period varied between 1,200 and 1,550 tons annually. From 1684 to 1692 it averaged 1,365 tons a year.⁶ In 1599 Queen Elizabeth I had arrogated to the Crown the right of pre-emption of all tin produced in England,⁷ and tin was also subject to the so-called 'coinage' duties of 4s. a hundredweight in Cornwall and 1s.6½d. a hundredweight in Devon.⁸ The early Stuarts customarily farmed the right of pre-emption and the 'coinage' duties together, and from 1628 to 1643 they were let at a rent of £12,000 a year.⁹ After the Civil War farming was resumed, though at first only the 'coinage' duties were let, for £2,000 - £2,500 a year.¹⁰ Efforts were made to include the right of pre-emption in the farm,¹¹ and from 1664 these were successful; however, the rent obtained was only £6,500 a year.¹² Even this proved more than the farmers could afford to pay,¹³ and the farm was surrendered in 1666¹⁴ and re-let in the following year at £5,000 a year.¹⁵ This was the position when proposals to coin tin farthings were first seriously considered. For the whole period 1660 to 1688 the pre-emption and 'coinage' duties yielded a total of some £45,000 to the Crown.¹⁶

II

By the end of the sixteenth century a need for coins of smaller denominations than the silver penny had become apparent as the market economy developed. This led to a proliferation of unofficial tokens, mainly of lead, though some were of copper, brass, tin, or even leather. Some of these were issued by towns;¹⁷ more by individuals, who were frequently unable, even if willing, to redeem them.

From time to time proposals were made to remedy this state of affairs. One especially influential recommendation came from Sir Robert Cotton, who saw an opportunity to derive a revenue for the Crown.¹⁸ About the year 1612, the dates on his title-page are inconsistent,¹⁹ he proposed an official issue of coins 'upon a simple mettal'. Since he referred to the Roman monies of '*aere argento, auro puto puro*' it is to be inferred that his plan was for fractional coins of copper, such as had been vainly advocated to Elizabeth I by her master of the Mint.²⁰ Cotton's proposal was for an initial issue of £120,000, which should yield £10,000 to the Crown, followed by annual issues of £12,000, which should correspondingly produce a profit of £1,000 a year. The coins would be legal tender up to one shilling.

Similar proposals were put forward by several other people, including John, Lord Harington of Exton²¹ and Gerard Malynes,²² and in 1613 James I, who had been familiar with copper coins in Scotland, granted Lord Harington a patent for the exclusive production of copper farthings for three years from May 1613.²³ He was to produce a 'competent quantity' of tokens, and no others were to be 'made, used or uttered' after June 24 of that year. The proclamation did not specify whether they were to be legal tender, but the Star Chamber later declared that they were not.²⁴ The profit from the patent was intended to compensate Lord Harington for large debts which he had incurred as tutor to James's daughter Elizabeth.²⁵

Lord Harington and his son both died in 1614, and the patent was continued briefly to his widow.²⁶ In July 1616 a successor patent was awarded to Edward Woodward and Thomas Garrett, London goldsmiths, on the nomination of Lord Harington's daughter Lucy, Countess of Bedford, and of Ludovick Stuart, second Duke of Lennox;²⁷ and in 1621 another to the Duke of Lennox and James, second Marquis of Hamilton.²⁸ All the projects so far mentioned were for tokens of copper, although the king's attention was unsuccessfully drawn to the possible advantages of tin coins in a memorandum in October 1620.²⁹

Harington's farthings were to be produced by machinery, and it was at first thought that the expense of this would protect them from being counterfeited.³⁰ However, this proved to be mistaken, and in 1636 the patent was amended to require that the tokens should be identified by 'a distinction of brasse'.³¹ By that time the patent had been acquired by Sir Francis Crane, chancellor of the Order of the Garter, and Henry Frederick Howard, Lord Maltravers (later third Earl of Arundel). These two obtained a renewal of the patent for twenty-one years, and in 1639 Lord Maltravers bought out his fellow-patentee for £6,000.³² But he had only a brief enjoyment of the patent. Within a year his monopoly was threatened by the king's plan to raise money by manufacturing £200,000-£300,000 of copper coins, to be used instead of silver to make one-tenth of all payments exceeding 2s.6d. This idea was abandoned only after strong commercial protests.³³ Then the Civil War intervened, and in 1643 Parliament prohibited the production of the tokens, on the ostensible ground that the copper, being imported, 'contributed to the overbalance of trade'. The fact that Lord

Maltravers was a Roman Catholic may have influenced this decision.³⁴ He died in 1652.

The forbidden private tokens came back into their own, and for the time being nothing was done to replace them. However, in 1651 the egregious Thomas Violet sent to the Mint Committee detailed proposals for farthings and half-farthings, which, he argued, were needed by 'the poorer sort'.³⁵ While earlier proponents had advocated either copper or tin for such coins, as the case might be, Violet's memorandum was one of the earliest extant ones to include a discussion of their respective advantages. Copper, he reported, was widely used in Europe for coinage. Tin, however, was a native commodity, would give employment to many English miners and tinners, and would obviate having to buy copper from Sweden. Provided that 'the tin pieces be made so heavy, and of such fine tin by the assay, that nothing could be got by it but the pay of the workmen', he foresaw that they would 'set many thousands of people at work in the tin mines in Cornwall'. Violet recognised that there was a risk that debased counterfeits, containing lead, might easily be made; there would have to be 'an Act making it [i.e. counterfeiting or clipping the coins] treason or felony at least'. He realised also that there would have to be some restriction on the acceptability of the farthings, which should not be usable, for example, to pay bills of exchange or to pay rents. No-one should be obliged to take more than sixpence in farthings.

No official notice seems to have been taken of Violet's plan, unless it is to be found in a comment by Sir John Harvey, calendared under the probably incorrect date 'May 1650?'.³⁶ This approved of the plan to provide farthings of tin or copper, provided that they were 'of full value' and were struck at the Mint; and suggested that there might be enough tin available from British mines to enable coins to be produced of sufficient intrinsic value to discourage counterfeiters.

In 1654 Thomas Dunsterville took up the point. He agreed that farthings were needed, but urged that the common metals - copper, brass, tin - if used for coins were liable to be counterfeited.³⁷ His solution was to use an invention of his own - a new alloy which was not generally available. He subsequently petitioned for the right to issue such coins.³⁸

In the last days of the Protectorate Violet came back with a plan for copper farthings to weigh two-fifteenths of an ounce each (twenty shillings' worth to weigh eight pounds avoirdupois).³⁹ This plan was approved by Richard Cromwell, subject to a levy of twelve pence on every twenty-two shillings' worth produced;⁴⁰ it does not, however, appear to have been put into effect.

III

The Restoration of Charles II led to plans for farthings being again considered, and in June 1661 the deputy master of the Mint, Henry Slingsby, reported to the King on the relative advantages of copper and tin. Because of the ease of working tin, and its ready admixture with lead, he advised against its use; any attempt to check counterfeiting by raising the price of tin through the right of pre-emption would mean the loss of export markets. Copper, he therefore concluded, was the fittest metal for coins.⁴¹

In 1662, and again in 1665, the Mint produced sample copper farthings and halfpence,⁴² but the only other action taken was to mint a quantity of silver pence and twopences, which failed to supply the required small

change.⁴³ In consequence, the mass of privately-produced tokens continued in circulation, in defiance of the prohibition. They afforded a living to a number of common informers, who prosecuted men and towns putting out such tokens, or blackmailed them as the price of turning a blind eye.⁴⁴

These conditions prompted the governors of the Royal Fishery, who were for ever seeking funds to revitalise their industry, to put forward in January 1665 a plan, originally suggested by Sir Edward Forde, for issuing copper farthings. They asked for a monopoly of the issue, offering terms that would have produced a twenty-five per cent profit for themselves.⁴⁵ On the other hand, Sir Richard Ford, then a farmer of the pre-emption and of the duties on tin, proposed an issue of tin farthings and halfpence, arguing that only by this means could the farmers of tin be saved from bankruptcy.⁴⁶ In this plan he was joined by Elias (or Eliah) Palmer, of Mile End.⁴⁷

Three years later Palmer reappeared, this time as a member of a group including Prince Rupert (acting through his secretary, Mr Hayes) and Henry Howard (son of Lord Maltravers).⁴⁸ They contended that tin coins would be less liable to be counterfeited; copper ones could be debased with lead. Also, copper varied in price according to conditions in Sweden, whereas the price of tin could be set by negotiations between the king, as pre-emptor, and the convocation of tinners. Palmer himself offered to pay £10,000 a year for the right of pre-emption provided that he was authorised to issue tin farthings and halfpence as legal tender.⁴⁹ This was an attractive proposition, justified (from Palmer's point of view) by the increase in demand for tin deriving from the proposed farthings. Nevertheless, tin was, of course, officially an untried metal for coins - although a small quantity of imitations of Harington's tokens had been privately provided as long ago as 1637, to the confusion of his majesty's subjects.⁵⁰

Presented with a problem of this complexity, the Treasury referred the papers to the Privy Council in August 1669.⁵¹ Much procrastination followed, but it seems that copper won the day, because in February 1671 the secretary of the Treasury addressed an enquiry to eleven eminent advisers. 'My Lords', the secretary wrote, 'intend trial of 30 or 40 pounds of copper into farthings by the Mint moneyers.' He desired them to 'consider and report the charges and the waste thereof, and the necessary expenses.'⁵²

No Treasury minute-book has survived for the period August 1670 to October 1671, so the reports of these advisers are not extant. However, they were presumably favourable, since in April 1671 the Treasury told Mr Slingsby, by now master of the Mint, of an offer by James Burkin and Henry Ward, copper merchants, to supply blanks at 14½d. a pound, and asked him to come to an agreement with them. The blanks would be imported from Sweden, for delivery in August or September 1671.⁵³ The Swedish supplier, Abraham Cronstrom, later asked for an increase in the price to 17d. a pound because of an export duty said to have been imposed by the king of Sweden at the beginning of 1672,⁵⁴ and in August 1672 a contract was in fact signed at that rate.⁵⁵ However, it was later alleged that the duty was removed in April 1673 without this being reported by Cronstrom; and although Cronstrom denied this, the price eventually paid was 14½d. a pound.⁵⁶

By November 1671 the Mint was ready to produce the coins, and the Treasury set about finding ways of raising £15,000 to finance the operation.⁵⁷ There is no trace of any copper arriving before January 1672, but by July 1672 Cronstrom had supplied £10,000 worth, over seventy tons, and Slingsby was instructed to proceed with all speed in coining farthings.⁵⁸ In August 1672 a royal proclamation gave currency to the issue.⁵⁹

The intention was to produce farthings at the rate of 20d. a pound

avoirdupois, out of which 3d. a pound was to be divided between the workmen and the officials of the Mint: 1 $\frac{3}{4}$ d. to the former, and 1 $\frac{1}{4}$ d. to the latter, to cover also 'incidentals'.⁶⁰ In practice, the average weight of the coins produced was certified to be such that only 19 $\frac{5}{8}$ d. went to the pound.⁶¹ This implied a profit of a little over 2d. a pound to the king, so that the intention of the authorising proclamation, that the coins would be of full value except for the cost of workmanship, was not fulfilled. Craig states that the cost of workmanship was 4d. a pound, not 3d; if so, the profit per pound would have been a little over 1d., but the proclamation was still breached.⁶²

It took some time for the new coins to be generally used, and indeed in December 1674 it was found necessary to issue a proclamation inveighing against those who hindered their acceptance, and those who continued to produce unauthorised tokens.⁶³

A year later Elias Palmer returned to the attack. He asserted that copper coins of an intrinsic value of 11d. were being minted at the rate of 22d. to the pound,⁶⁴ and as a result were being extensively counterfeited.⁶⁵ He repeated his contention that tin coins could be produced which would not be similarly copied.⁶⁶ The Treasury consulted the Mint, which disagreed, repeating the advice which Slingsby had given in 1661.⁶⁷ It added, rather acidly, that Palmer could not meet the cost of minting coins (estimated at twenty per cent of the cost of the metal) and also provide a revenue of £50,000 to £60,000 a year to the king, as he was promising, if, as he also proposed, the tin coins were made of their intrinsic value.⁶⁸ A contemporary writer, glossing the Mint's objections, added that the tin coins could not be economical because once they were worn their value would be little more than 2d. a pound; pewterers, the main English users of tin, would not buy them because to do so would be against the 'laws or orders of their Company'.⁶⁹

Amidst these arguments and counter-arguments, it appears to have struck the Treasury that at least the diametrically opposed views about the possibility of producing imitation-proof tin coins should be capable of resolution by experiment. They accordingly instructed Palmer to produce, with the aid of the Mint, some specimen tin coins; and required the Mint, within a week, to produce, if it could, acceptable counterfeits.⁷⁰ The Mint dragged its feet for three months, but then brought forward some specimens which Palmer claimed to have had no difficulty in exposing.⁷¹ One, adulterated with lead, was revealed by 'weighing the farthings in air and water', i.e. by reference to specific gravity. The impure antimony contained in another specimen was, Palmer argued, actually more expensive than tin, and was therefore unlikely to be used by counterfeiters. A third coin was, or so Palmer asserted, pure tin.⁷²

While this was going on, minting of the copper coins continued, although it seems that there was a pause after 22 February 1676, when it was reported that £40,252.16s.11d. had been produced.⁷³ Three months later the Committee for Trade, encouraged by the Treasury-sponsored experiments to expect an acceptable substitute for copper, recommended that its use should cease, and that future coins should be made of tin. This was approved by an Order in Council on 28 June.⁷⁴ The latest batch of copper coins, with a face value of £7,281.8s.8 $\frac{1}{2}$ d., was knocked down to a private buyer for £6,965 on the understanding that he would hold them for three months before using them.⁷⁵

This was not, however, quite the end of the copper coins. In March 1679 it was found that the suppliers of copper blanks, under contract to the Mint, still held some 16,500 pounds weight of them. Charles II agreed,

despite the decision to end the issue in 1676, that these blanks could also be coined,⁷⁶ producing some £1,500 worth of farthings and halfpence. The total issue, therefore, seems to have been rather less than £42,000.⁷⁷ On this the profit to the Crown will have been some £4,500 if production costs were, as estimated, 3d. a pound. However, if Craig is right in reporting them at 4d. a pound, the profits cannot have exceeded £2,400.⁷⁸

IV

This final development was, of course, still in the future when in July 1676 Sir Robert Southwell, secretary to the Privy Council, prepared to implement the Council's Order. His first step was to ask Palmer for details of his proposals.⁷⁹ What appears to have been Palmer's response to this enquiry added several points to those put forward a quarter of a century earlier by Thomas Violet.⁸⁰ Because the copper had to be imported, the balance of trade suffered; and it was to be feared that a further drain was caused by imported counterfeits. On the other hand, tin was a 'commodity of this Kingdom'. Minting tin coins was the only way of raising the price of tin sufficiently to encourage the miners to dig more of it, and thus yield more 'coinage' duties to the Crown. This would also (contradicting Slingsby's view) benefit exports; in effect, because the foreign demand for tin was inelastic. Palmer further asserted that tin coins, hardened by a suitable alloy, could be made of a value equal to their intrinsic value, so avoiding counterfeits, because the value of tin was in British control.

But now two other interested parties appeared on the scene. One was Henry Howard, by now Baron Howard of Castle Rising, and later successively Earl of Norwich and sixth Duke of Norfolk. He claimed on 10 July 1676, that the patent granted to his father, as Lord Maltravers, in 1636, and abrogated by the Commonwealth Parliament, should be renewed to himself, giving him the sole right to produce farthings and halfpence. Lord Howard reminded the Council that at the Restoration, and again in 1669 (actually 1668) he had put forward proposals that had been rejected.⁸¹

The other intervention came from the group who had farmed the pre-emption and the 'coinage' duties from 1661 to 1666. Their spokesman was Sir William Smyth. As a condition of resuming the farm, they sought the right to coin farthings, halfpence, and pence, of tin.⁸² In August 1676 the Committee for Trade referred this request to the lord treasurer,⁸³ and by the end of 1676 agreement had been reached by which the farmers would produce tin coins at a rate not exceeding 16d. per pound of tin. They were to be ready to receive them back, if broken or defaced, at 12d. per pound. They undertook to produce £10,000 worth by Lady Day 1677, and £10,000 more by midsummer. Out of these they were obliged to exchange genuine copper farthings and halfpence, at their face value, at least until Christmas 1677.⁸⁴ The quantity to be exchanged was estimated at £40,000.⁸⁵ Because many of the copper coins in circulation were light-weight ones, or were debased,⁸⁶ this operation was expected by the farmers to produce a loss of £11,000 to £16,000. It was agreed that half the loss, up to £5,500, would be borne by the Crown.⁸⁷

No action followed on these negotiations, because the king was reported to be dissatisfied with their outcome; he toyed with the idea of replacing the farmers of tin by commissioners, as a more profitable way of exploiting the pre-emption.⁸⁸ Lord Treasurer Danby seems to have followed up this idea by purchasing and storing a large quantity of tin⁸⁹ in preparation for the operations of commissioners. However, in May 1679, following Danby's im-

peachment, Sir William Smyth's plan was, after all, approved. A grant for this purpose, for twenty-one years, associated with him the Duke of Monmouth and John Sheffield, third Earl of Mulgrave. Operations were to begin on Lady Day 1679, tin farthings, halfpence and pence being minted at 16d. to the pound weight. The copper coins were to be exchanged by Lady Day, 1680.⁹⁰

But now it was the farmers' turn to drag their feet. Their reasons are not set out, but it may be conjectured that they realised that neither as farmers nor as minters would it be possible to make enough profit to cover their rent of £12,000 a year. Danby's hoard of tin overhanging the market would depress the price for some time to come, and would involve extra costs for the capital required to hold new production in reserve. And although cheap tin would be an advantage to their mint operations, the proposed rating was too low for them to expect much profit from the coins. Finally, the additional copper coins authorised in March 1679 would add to the cost of redeeming them. Whatever the reason, the farm was not taken up. Neither was minting started, as the attorney-general ruled that this must wait until the farm was settled.⁹¹ All that happened was that in May and June 1680 the Treasury referred the terms of the 1679 agreement, and some supplementary proposals from Smyth, to two advisers, William Harbord, surveyor of Crown Lands, and Robert Napier, receiver-general and auditor of the Duchy of Cornwall, who had himself in the past farmed the pre-emption.⁹²

For the next two or three years no official action was taken about the growing shortage of small change. This was not for want of suggestions. Proposals from members of the public for the supply of farthings and halfpence were referred to the Treasury in April and October 1682, and again in December 1683.⁹³ Sir William Petty joined in, writing in August or September 1682 to Sir Robert Southwell about his *Quantulumcunque concerning money*, in which he recommended minting base-metal farthings.⁹⁴ His arguments included the novel one that copper was better used for such coins than tin, even if the copper had to be imported, because exports of tin gave England a comparative advantage in international trade.⁹⁵

The natural effect of official inactivity was the appearance of still more unofficial tokens, which in turn gave rise to a further crop of informers, who were, however, discouraged by authority, from Lord Chief Justice Jeffreys downwards.⁹⁶

V

At last, in February 1684, an initiative came from the Mint commissioners: Sir John Buckworth (a prominent London merchant), Sir Charles Duncombe (banker, and receiver of the customs), and James Hoare, Senior, (comptroller of the Mint). They had been appointed in June 1680 to execute the office of master of the Mint, from which Slingsby had been suspended for incompetence.⁹⁷ The commissioners proposed an issue of tin farthings and halfpence, reviving the argument that tin was a native metal, unlike copper, the purchase of which benefited Sweden. They suggested that to make use of tin for coinage would probably prevent a further fall in its price, and might enhance it, to the profit of the Crown. They also said that they believed that a great part of the copper farthings had been exported to the Americas, suggesting that there would be scope for tin farthings there as well.⁹⁸

Three months later the Treasury decided upon an issue of tin farthings

and halfpence along the lines suggested. They were to be minted at the rate of 20d. to the pound of tin, instead of 16d. as in the negotiations in 1676. As the metal was available at 8d. a pound, and the cost of manufacture and distribution was estimated at 4d. a pound, a profit of forty per cent on them was expected.⁹⁹ (This would of course replace the rent which private contractors would have paid.) On 3 July 1684, the first of a series of warrants for advances to buy tin was issued to the three commissioners, the necessary £8,000 being lent to the Crown by Duncombe himself.¹⁰⁰

In December 1684 a royal warrant formally authorised the commissioners to produce tin farthings and halfpence with a copper stud in the centre of each coin.¹⁰¹ Work had actually begun some months earlier in the Skinners' Hall, Dowgate Street, which was leased from that Company in August 1684.¹⁰² Sir John Buckworth left the commission in February 1685, and the commission itself was disbanded in 1686, when Slingsby resigned and was succeeded as master of the Mint by Thomas Neale.¹⁰³ However, its members remained responsible for the production of the tin coins until Michaelmas 1688. The ubiquitous Palmer appears to have transferred his assistance to them; an account which they submitted, and which is discussed below, showed a payment to him of £120.2s.5d. for 'several services relating to this affair'.¹⁰⁴

The next development was that in June 1688 a new group undertook the farm of tin.¹⁰⁵ This comprised John Granville, first Earl of Bath, formerly lord warden of the Stannaries, and now lord lieutenant of Cornwall and Devon; Sir Thomas Griffith; Thomas Hartopp; and two merchants, Richard Holt and James Kelke.¹⁰⁶ These last four were business associates,¹⁰⁷ and Kelke as warden of the Pewterers' Company naturally had a particular interest in tin. This group, with others, put forward a series of proposals for the farm from January 1688 onwards.¹⁰⁸ The upshot of the negotiations was a contract, signed on 2 June 1688, by which the farmers undertook to pay £16,000 a year for the right of pre-emption and the 'coinage' dues.¹⁰⁹ They offered also a further £2,000 a year for the right to coin tin farthings and halfpence up to a limit of £10,000 a year for the first three years, and a total of £30,000 thereafter.¹¹⁰ The contract was to run for eleven years from 24 June 1688.¹¹¹

Almost immediately, however, difficulties emerged. Eight days after the contract was signed the Prince of Wales was born, and his rights as Duke of Cornwall made it necessary for the group to take 'good counsel'. From the outset, also, financial troubles loomed: the farmers had bought the current output of tin at the contract price of £3.10s.0d. a hundredweight, but because of 'the difficulties of the times' had been unable to sell it.¹¹²

It appears also that the contractors had not been able to start minting farthings or halfpence, even though Richard Holt, on their behalf, had taken over the plant at Skinners' Hall which the previous commissioners had been using. (Elias Palmer is mentioned as an alternative to Holt as a possible recipient for the plant, so it would appear that he was now connected with the Earl of Bath's group, though in what capacity is not clear).¹¹³

Reporting on these difficulties in March 1689, the comptroller of the tin farm, Charles Godolphin, suggested that the farmers should be required to pay a half-year's rent of the farm (£8,000) and that other steps should be taken to resume the minting of farthings and halfpence 'as it would be a public disservice that the fabrication of tin coins should be longer discontinued'.¹¹⁴

Meanwhile James II had given way to William and Mary, and it would appear that the new monarchs were consulted as to their wishes. Possibly to assist their decision, the Mint produced specimen copper farthings dated

1689.¹¹⁵ However, in September 1689 the Treasury requested Sir Hugh Boscawen, the surveyor of the Cornish 'blowing houses', to make discreet enquiries into the price of tin 'as the King intends to coin tin farthings'.¹¹⁶

On 12 October 1689 the decision was reached to resume the minting of tin coins, and its supervision was entrusted to a fresh group of three commissioners, headed by Charles Godolphin. James Hoare, Senior, of the Mint, was again included. The third commissioner was one Andrew Corbet (or Corbett).¹¹⁷ In November these three reported that tin could be bought in London at £63.10s.0d. a ton (just under 7d. a pound) and were given an imprest of £1,000 to enable them to start work before the arrival of tin on order from Cornwall.¹¹⁸ By 24 January 1690 the Mint had produced ten tons of coins, equivalent to 1.79 million farthings, and was expecting fifty tons of tin from Cornwall.¹¹⁹ This would yield more coins than could be absorbed in England; what about Ireland? In the event, the attorney-general ruled that tin farthings could be sent to Ireland despite the existence of a patent to provide copper halfpence there, running for twenty-one years from 32 Charles II (1680–81), and now owned by Roger Moore.¹²⁰ Ultimately some £8,500 worth of farthings (over eight million) were sent there.¹²¹

By March 1690 minting had reached £2,500, but counterfeits had already appeared: the commissioners reported that a quantity of farthings 'called Prince of Wales' farthings' had apparently been lately coined, and were 'dispersed about the town'.¹²² Perhaps because of this competition, the disposal of the newly-minted official coins proved a slow business, and in April 1690 the Treasury agreed to compensate the commissioners if they had to borrow to keep the Mint working.¹²³ Their wages bill was £520 a year.¹²⁴ In May 1691, embarrassed by their inability to dispose of their output, the commissioners appealed to the Treasury, who left it to them to find outlets for the coins as they thought best.¹²⁵ For the next two months production was halted 'in expectation of tin to be delivered'.¹²⁶ The commission was reconstituted in July 1691, without Godolphin, who was replaced by Thomas Povey, a master of Requests.¹²⁷ The production of tin coins appears to have ended late in 1692.¹²⁸

The issues of these coins were far more profitable to the Crown than had been those of copper. Detailed accounts are available for the activities of the first group of commissioners (Buckworth, Duncombe and Hoare) from Lady Day 1684 to Michaelmas 1688. During the first three years of this period they produced some £22,000 worth of coins at a cost of £8,100 for tin and £5,400 for workmanship.¹²⁹ They asked for £1,800 for supervising the work, but the Treasury allowed them £1,200 only. A second account, dated 12 August 1703, deals with the eighteen months from Lady Day 1687 to Michaelmas 1688, during which Duncombe and Hoare minted a further £5,567 worth of coins, at a cost of £3,623, for which they were allowed £300 each.¹³⁰ Their payments to the Exchequer in respect of their four and a half years work totalled £9,678, some thirty-five per cent of the value of the coins produced.

From Michaelmas 1688 until October 1689 minting was in abeyance, but thereafter it appears to have been actively pursued, as the profit realised from October 1689 to September 1691 was £12,885,¹³¹ which implies an output of nearly £36,000. The total produced to the latter date was therefore more than £63,000.¹³²

Unfortunately we have no detailed accounts for either the second group of commissioners (Godolphin, Hoare and Corbet) or the third group (Corbet, Hoare and Povey). The only extant summary, dated 31 January 1702, relates to the work of the third group, but does not state what period it covers.¹³³

It shows their 'charge' (obligations, mainly for coins produced) as £18,548, and their 'discharge' (costs plus payments to the Exchequer) as £18,418. If this account covers the whole period of the responsibility of this group, they and the second group contributed about equally to the £36,000 worth of coins produced under William and Mary.

The final output of tin coins was a little over £65,000,¹³⁴ and if the second and third groups were as efficient as the first, the Crown must have benefited by some £23,000, spread over three reigns. It should be noted, however, that none of the available accounts make any mention of the cost of exchanging the copper coins, and it may well be that the aggregate of £23,000 should be abated by the £5,500 which the Treasury agreed to pay towards the cost of the operation.

VI

On 1 February 1692 the commissioners were told to consult the attorney-general about the prevalence of counterfeit farthings and halfpence.¹³⁵ At the same time, the supporters of copper in preference to tin took heart and began to put forward fresh proposals. In July the recently-chartered Governor and Company of Copper Miners offered to coin 500 tons in pennies, halfpence, and farthings at a rate of 2d. a pound avoirdupois, paying an annual rental of £2,500 in advance. Invited to comment, the Mint authorities reported that copper was preferable to any other base metal for such small coins. Five hundred tons at 2d. a pound would produce £112,000; if the Company could dispose of quantities as large as that, the Mint thought that its costs and the £2,500 rent could be fully covered if the coins were rated at 2d. to the pound. The Mint also advised that the contractors should be required to use the newly-available English or Welsh copper, of a similar standard of fineness to the Swedish copper previously obtained for coins.¹³⁶

Seemingly persuaded by the arguments in favour of copper, but not heeding the Mint's other advice, the Treasury accepted, on 8 February 1693, an offer by Andrew Corbet to pay a rent of £1,000 a year for the right to manufacture copper halfpence and farthings for nine years. They were to be rated at 2d. a pound, with a 'remedy' (tolerance) of one halfpenny per pound. Corbet might coin a total of 120 tons in any of the first four years and sixty tons in any of the succeeding five years. It was a condition of the agreement that he was to exchange his coins, by tale, with tin farthings and halfpence, which were then to be melted down.¹³⁷

Corbet in fact minted only a few copper farthings; they proved to be light and ill-struck,¹³⁸ the proposed contract with him was never sealed,¹³⁹ and by April the issue of his coins had been stopped.¹⁴⁰ Furthermore, protests against the abandonment of tin had begun to come in, and after the Cornish members of Parliament had joined in them,¹⁴¹ the Treasury decided that it would be better to refer the matter to the Privy Council.¹⁴²

On 9 March 1693 the officers of the Mint were again asked to advise whether tin or copper coins were easier to counterfeit.¹⁴³ A week later they answered that either could be counterfeited with equal ease and profit. They added, reversing the advice they had given only eight months earlier, that they would recommend using tin because so much was mined in England, and because their majesties would profit if the operation raised the price of tin.¹⁴⁴ To a subsequent question whether a mixture of tin and copper would be safer, they replied in the negative.¹⁴⁵ Further consideration followed, but in September the Treasury proposed to the queen, acting as regent in

William's absence abroad, that the Copper Miners' offer should be accepted, subject to their reducing the rating of the coins to 22d. to the pound, and to a limit of five years. English copper was to be used.¹⁴⁶ They repeated this advice in a further report in December, adding that the Copper Miners would pay a rent of £2,500 a year.¹⁴⁷

In January 1694 the Treasury received a proposal from Abel Slaney (an army contractor and writer on currency)¹⁴⁸ and Daniel Barton to manufacture copper farthings and halfpence, for which they offered a rent of £3,500 a year. However, the Treasury stuck to its recommendation of the Copper Miners' Company, saying that the Company had made extensive and expensive preparations, and that it was willing to increase its offer to £3,500 a year.¹⁴⁹ Rumours of all these negotiations are reflected in a series of entries in Luttrell's diary - which, however, are invariably inaccurate.¹⁵⁰

By now the condition of the tin coins had become the subject of many complaints. Petitions to the House of Commons in March 1694 criticised the coins for being worth only two-thirds or three-quarters of their nominal value, and sought assurances that they would be redeemed by tale. One group of petitioners also asked that future coins should be produced by the Mint, and not by private contractors.¹⁵¹ The Commons committee to which the petitions were referred supported both requests in a report on 17 April, which recommended that future coins should be made at the Mint, of English metal of full intrinsic value, and that genuine tin coins should be redeemed at their face value in the new coins.¹⁵² The word "copper" did not occur in the committee's report, but their criticisms of the tin halfpence and farthings made their intentions clear. The immediate effect was to throw doubt on the continued validity of the tin coins.¹⁵³

Pursuant to the committee's report, the Treasury placed a new contract in June 1694. The licencees were Sir Joseph Herne (or Heron), governor of the Copper Miners' Company, Sir Francis Parry, George Clark, and the unsuccessful tenderers in January, Abel Slaney and Daniel Barton.¹⁵⁴ They were to manufacture 700 tons of copper farthings and halfpence over seven years at the rate of 21d. a pound, with a remedy of one halfpenny a pound. Presumably in consideration of the lower rating imposed, no rent to the Crown was provided. It was, however, a condition of the contract that they would employ at £200 a year a comptroller nominated by the king; the man appointed was Andrew Corbet,¹⁵⁵ who was, however, replaced in August 1696 by Philip Shales.¹⁵⁶

A second condition of the licence was that the copper for their coins must be cut into blanks by the Mint workmen; if desired, the stamping could also be done by the Mint. The licensees elected to place the whole job with the Mint, and during 1695 these arrangements appear to have worked smoothly, although the quality of the workmanship was below the Mint's normal standard. Contemporaries complained that the coins were lighter in weight than was required, and were cast, not rolled and cut, as the licence called for.¹⁵⁷ This was apparently due to the Mint experiencing difficulty in working English copper.

A third condition of the licence was that the contractors would exchange tin coins for copper ones, by tale, at a rate not exceeding £200 a week, the tin to be melted down. Accordingly they gave notice that they would begin to make such exchanges on 6 November 1694.¹⁵⁸ Ten days later they were told to exchange £700 worth of tin farthings and halfpence held by the postmaster-general, at the rate of £100 a week,¹⁵⁹ and in March 1695 to exchange £200 held by the Penny Post Office at £30 a week.¹⁶⁰

The priority given to these exchanges soon caused trouble. In January

1696 a fresh series of petitions reached the House of Commons, complaining particularly about the difficulties experienced in exchanging tin coins for the new copper ones.¹⁶¹ A committee was appointed to examine the complaints, but the contractors, represented by Sir Francis Parry, successfully contested them.¹⁶²

Shortly afterwards, however, they suffered a serious setback. Parliament decided to recoin the whole of the silver in circulation, with the result that in 1696 and 1697 the Mint turned out £4,700,000 in silver coins, compared with an average of £3,500 a year during the previous six years.¹⁶³ Thus occupied, it had to divert away from stamping copper coins seven presses which had previously been made available, reducing output substantially,¹⁶⁴ and producing complaints of acute shortages of small change.¹⁶⁵

Worse still, the price of copper rose above the 1d. a pound (£102.67 a ton) on which the contractors had reckoned.¹⁶⁶ The market price quoted by Houghton rose from £90 to £100 a ton on 6 September 1695, and remained unchanged until 25 September 1696, but then altered to £120 a ton. At that level it remained until 16 April 1697, after which no further quotations were given.¹⁶⁷ It would appear, however, that the increase to £120 a ton actually occurred earlier than September 1696, since in April of that year it was mentioned in the House of Commons as the cost of copper being supplied by Dockwra's company.¹⁶⁸ In May 1696 the contractors told the Treasury that they had to pay £130 a ton for some supplies,¹⁶⁹ and this figure was repeated in a broadside reproducing the contractors' petition to Parliament.¹⁷⁰ They asked permission to alter the weight of the coins proportionately to the increased cost of the metal, and to use Swedish copper,¹⁷¹ but there is no indication that either concession was granted.

The increased cost of copper had a disastrous effect on the outcome of the contract. By Lady Day, 1696, the accounts submitted by Corbet as comptroller showed that the contractors had made a net loss of £3,986.5s.1d; they were then losing money at the rate of £87 a week.¹⁷² Part of this loss arose from the obligatory purchase and melting down of the tin coins, which produced only £60 a ton compared with the £200 a ton which they were said to have cost by tale.¹⁷³ By June 1698, when £38,400 of the tin coins had been taken in exchange, the loss had risen to £6,280.¹⁷⁴

So far the contractors had minted 509 tons of copper into halfpence and farthings; at the rate of 2½d. a pound, which they were using,¹⁷⁵ this represented £102,000 worth. This appears to have produced some symptoms of glut, and Parliament ruled that minting must cease for a year from 24 June 1698.¹⁷⁶ The contractors complained that they had no chance of making a profit on the whole job unless they were able to coin the 191 tons remaining of their agreed 700 tons, because the obligation to exchange tin coins by tale had resulted in an over-all loss to that date. As their contract was for seven years only, from June 1684, it was essential that they should be left free to complete the term, and not suffer any further interruption.¹⁷⁷ This representation was made in a petition to the House of Commons against a bill imposing a further year's halt in production. The bill was none the less passed by the Commons, but the Lords, having heard counsel for and against the ban, rejected the bill,¹⁷⁸ and no further hindrance was placed in the contractors' way. They continued to produce farthings until 1700 and halfpence until 1701,¹⁷⁹ presumably completing the £140,000 worth which corresponded to 700 tons.

The contractors had naturally expected that there would have been a sufficient margin between the rating of 2½d. to the pound and the costs of production plus the purchase of the tin coins, to have left them a satis-

factory profit. But the enhanced price of copper defeated this calculation. Mint charges were 5d. a pound,¹⁸⁰ the salary of the comptroller represented a charge of £2 a ton (a little over 0.2d. a pound) and the loss on exchanging the tin coins was equivalent to 4d. a pound of copper ones. The margin available for purchasing copper, and for profit, was therefore 12.3d. a pound. With copper costing £120 a ton (nearly 13d. a pound) or more, their margin disappeared. Abel Slaney, regarded by contemporaries as the leading licensee,¹⁸¹ petitioned the Treasury in 1702 for the right to mint more coins, on the ground that he and his partners had 'sustained great losses' on the contract.¹⁸² However, the Treasury was satisfied, in the terms of a minute dated 17 April 1705, that 'there is no want of copper mony in any part of England at present', and it decided that when the need arose it should be met by the Mint, and not by private contractors.¹⁸³ In fact, except for an abortive issue of copper coins in 1714, cancelled by the death of Queen Anne, no further copper was minted until 1717, and the experiment with tin was never repeated at all.

VII

Before attempting to assess the economic impact of the issues described above, it will be well to note that the hopes of those who had proposed them were pretty uniformly disappointed. In particular, neither copper nor tin coins were immune to counterfeiting, and it was partly because of public disapproval of counterfeits that the use of each metal was discontinued in turn. The main difference in this respect was that the tin coins (1684-92) were more profitable to forge, despite the plug of copper in the middle of each, because the cost of the metal plus workmanship was substantially less than the face-value of the coins. This was much less true of the first issue of copper (1672-79), and not much truer of Corbet's abortive effort (1693) or the second official issue of copper (1694-1701).

The three official issues were for progressively larger amounts, the first copper being for about £42,000, the tin for about £65,000, and the second copper for about £140,000. These were, however, not cumulative; the contractors for the tin issue were required to purchase and cancel the preceding copper coins, and those for the second copper issue agreed to redeem and melt down the preceding tin ones. Moreover, the coins did not necessarily remain in England (we hear of some sent to Ireland and others to the Americas); and even those remaining here tended to gravitate into involuntary hoards, such as those of the postmaster-general¹⁸⁴ and of retailers.¹⁸⁵

The economic effects of these issues may be looked for in three directions: their impact on the volume of currency in circulation, and so perhaps on prices generally; their consequences for the industries producing the metals used; and their effects on the balance of payments.

As regards the volume of currency, only a negligible effect can have been produced. This is true of the third, and largest, issue, and *a fortiori* of the others. The third issue represented in all only some 0.7 per cent of the currency in existence when it began, estimated by Newton at over £19,600,000.¹⁸⁶ Even during the more active first four years of the seven over which the issue was spread, the gross addition to the circulation was only some £25,000 a year. From that sum there must be deducted approximately £9,000 annually for the withdrawal of the tin coins. Taking into account also the disappearance of unofficial tokens, not to mention the concurrent dislocation caused by the war and the recoinage, even this, the largest, issue cannot have had any discernible effect on the general price-level.

However, this does not of course preclude its affecting the cost of the metal itself.

As the copper for the first issue of coins (1672-79) was imported, the British industry was involved only from 1693 onwards. Corbet's abortive issue (1693) was too small to have any impact, but that managed by Slaney and others required 509 tons of copper in the four years from June 1694 to June 1698. This seems to have absorbed an appreciable fraction of the total British output, even if this reached the possible total of 300 tons a year. The natural result was a considerable increase in the price of copper, affecting not only the contractors for halfpence and farthings, as noticed above, but other users as well. For example, the cost to the British Navy of copper articles, which averaged £146 a ton in 1693 and 1694, rose to £158 a ton in 1695, £187 a ton in 1696-1700, and £205 a ton in 1701.¹⁸⁷ It is true that these were war years, but this was no less true in Amsterdam, and there the price of copper rose only by ten per cent from 1694 to 1701.¹⁸⁸

The effects of the introduction of the tin coins were of a different order. The total output of tin in Cornwall and Devon during the nine years (1684-92) when they were being minted was 12,287 tons.¹⁸⁹ This was 1,200 tons greater than in the preceding nine years, and 800 tons greater than in the succeeding nine. As the quantity required for the coins was only some 350 tons in all, they clearly made only a minor contribution to the enhanced output at the time. However, on the assumption that the whole 350 tons was additional to what would otherwise have been produced, it can be calculated that it would have required on average the employment of perhaps 300 tinniers.¹⁹⁰ This was a far cry from the 'many thousands' of new workers envisaged by Thomas Violet.

The fact that output between 1684 and 1692 was so much greater than in the years before and after that period makes it unsurprising that the price in fact fell, the tinner receiving between 6½d. and 7½d. a pound in 1684 and between 5½d. and 6d. a pound in 1692.¹⁹¹ This again ran counter to expectations, which were that to use tin for coins would increase its price. .

None of the three issues which we have examined appears to have had any noticeable impact on the balance of payments. The effect of the necessary imports of copper between 1672 and 1676 cannot be quantified because no general trade figures exist before 1697. It is, however, known that trade with Scandinavia was brisk; between 1701 and 1705, for example, imports from Sweden averaged £195,000 a year.¹⁹² It seems unlikely that, even thirty years earlier, the addition of some £6,000 a year to such imports was significantly detrimental, despite the anxieties expressed by the Commonwealth Parliament thirty years before that again.

So far as the second copper issue (1694-1701) is concerned, the balance of payments will have been affected only to the extent that the manufacture of the coins diverted to home use copper that otherwise would have been exported. There is no evidence of such an effect: exports of copper, which were in any case very small (£3,683, under thirty-five tons, in 1697) rose each year until 1700.¹⁹³ After that, they fell again.

As regards the tin coins, little diversion from exports might *prima facie* be expected, because prices in foreign markets tended to be higher than at home.¹⁹⁴ In any case, exports appear to have varied so much from year to year that the impact of any such diversion might not be distinguishable. Unfortunately, for the years when the coins were being produced (1684-92), statistics of the exports of tin are available only for Cornwall (true, the principal producer) and are even fairly complete only for one year, 1685.¹⁹⁵

They were then 193 tons (fourteen per cent of output), but this was more than twice the known exports in 1681, and more than six times those in 1697, these being the nearest years for which data are forthcoming. Taken in conjunction with the fall in price, noted above, these facts suggest that the balance of payments was unaffected by the minting of tin.

NOTES

1. 5 Henry IV, c.4.
2. 1 William & Mary, c.30, s.4, explained by 5 William & Mary, c.6.
3. W.R.Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Cambridge, 1912, reprinted New York, 1951), II, 430.
4. John Houghton, *A Collection for Improvement of Industry and Trade* (1697). (1727 edition, II, 186).
5. A principal source of copper was Cornwall, and all ore dug there was shipped to South Wales or Bristol for smelting. Such shipments of ore totalled 1,420 tons in 1694, rising to 2,164 tons in 1696. (James Whetter, *Cornwall in the 17th Century* (Truro, 1974), p.117). The copper content of ore from Cornish mines in the first thirty years of the nineteenth century averaged 8.6 per cent (calculated from J.R.McCulloch, *A Dictionary...of Commerce*, second edition, (London, 1834), p.399). If this applied in 1694-96, the output of copper from Cornwall alone would have risen from 122 to 186 tons. Copper was also produced elsewhere in England and Wales. Also, the grade of ore produced may have been higher in 1694-96 than in 1800-30, when it was actually tending to fall.
6. Calculated from data in G.R.Lewis, *The Stannaries* (Truro, 1908), p.256.
7. F.C.Dietz, *English Public Finance, 1485-1641* (New York, 1932, reprinted London, 1964), II, 90.
8. Lewis, p.149.
9. *Calendar of State Papers Domestic* (hereafter *CSPD*), 1634-35, p.586; *CSPD* 1635, p.606; *CSPD* 1660-61, p.508.
10. *CSPD* 1660-61, p.497; *CSPD* 1667, p.96.
11. *CSPD* 1661-62, p.445.
12. *Calendar of Treasury Books* (hereafter *CTB*), 1660-67, p.264; *CSPD* 1663-64, p.660, corrected by *CTB* 1669-72, p.208.
13. *CSPD* 1666-67, p.192; *CSPD* 1667-68, p.144; *CSPD* 1671, p.546.
14. *CSPD* 1666-67, p.192; *CTB* 1669-72, p.208.
15. *CSPD* 1667-68, p.112; *CTB* 1667-68, p.209.
16. C.D.Chandaman, *The English Public Revenue, 1660-1688* (Oxford, 1975), p.125.
17. For Bristol issues see C.E.Challis, *The Tudor Coinage* (Manchester, 1978), p.209 (copper); and *CSPD*, 1611-18, p.184 (lead).
18. Sir Robert Cotton, 'The Manner and Meanes how the Kings of England have from time to time supported and repaired their Estates', reprinted

- in J[ames] H[owell], *Cottoni Posthumus...* (London 1651 and 1672), pp.196-99 (i.e. 198-99).

 19. The dates are '*Anno nono Jacobi Regis Annoque Domini 1609*'. James's ninth year ran from March 1611 to March 1612. In *CSPD 1611-18*, p.165, the memorandum is cited as '1612?'.
 20. Sir John Craig, *The Mint* (Cambridge, 1953), p.128; R.Ruding, *Annals of the Coinage of Great Britain*, third edition (London, 1840), I, 346.
 21. *CSPD 1611-18*, p.141.
 22. *CSPD 1611-18*, p.184.
 23. James I. *Proclamation for Farthing Tokens* (19 May 1613).
 24. Order of 20 June 1634 (copy in PRO, Mint 1/1, p.115); cited in *CSPD 1634-35*, p.85.
 25. *CSPD 1611-18*, p.175.
 26. *CSPD 1611-18*, p.237.
 27. *CSPD 1611-18*, p.357; cf. James I. *A Proclamation for the continuing of Farthing Tokens* (17 March 1617).
 28. *CSPD 1619-23*, p.304; cf. Charles I. *A Proclamation for continuing our Farthing Tokens* (30 May 1625).
 29. *CSPD 1619-23*, p.183.
 30. Craig, p.140.
 31. Charles I. *Proclamation concerning Farthing Tokens* (1 March 1636).
 32. *CSPD 1635-36*, p.236; *CSPD 1660-61*, p.386.
 33. S.R.Gardiner, *The Fall of the Monarchy of Charles I* (1881), I, 392, 428.
 34. *Calendar of Committee for Advance of Money*, I, 125; II, 620; *CSPD 1676-77*, pp.215, 482.
 35. *CSPD 1651*, pp.313-15; *CSPD 1651-52*, p.23.
 36. *CSPD 1650*, p.182.
 37. C.Wilson Peck, *English Copper, Tin and Bronze Coins in the British Museum, 1558-1958*, second edition (1964), pp.592-97. I am indebted to a referee for this point.
 38. Peck, pp.600-01.
 39. Peck, p.598.
 40. Peck, p.599.
 41. *CSPD 1661-62*, p.3.
 42. Craig, p.173.
 43. Charles II. *Proclamation for making current His Majesty's Farthings and Halfpence of copper...* (16 August 1672) (hereafter Charles II, *Proclamation*, 1672).
 44. *CSPD 1671-72*, p.53; *CSPD 1672*, p.519.
 45. *The Diary of Samuel Pepys*, 13 September 1664 and 3 December 1664; *CSPD 1676-77*, p.250; *CSPD 1699-1700*, pp.330-31.
 46. *CSPD 1676-77*, pp.250, 258.
 47. *CTB 1667-68*, p.438.
 48. *CTB 1667-68*, pp.302, 333, 346, 353, 391-92, 407, 426-27, 434, 436, 438.
 49. *CTB 1669-72*, p.53.
 50. *CSPD 1636-37*, p.441.
 51. *CTB 1669-72*, p.129.
 52. *CTB 1669-72*, p.791.
 53. *CTB 1669-72*, p.819.
 54. *CSPD 1675-76*, p.476; *CTB 1669-72*, pp.1094-95.
 55. *CSPD 1672*, p.497.

56. *CTB* 1669-72, pp.1094-95; *CSPD* 1675-76, p.476; *CTB* 1676-79, p.1267.
57. *CSPD* 1672, p.312. 58. *CTB* 1669-72, p.1088.
59. Charles II: *Proclamation*, 1672. 60. *CSPD* 1673, pp.144, 153, 187.
61. *CSPD* 1676-77, p.202.
62. *CSPD* 1676-77, p.202. Craig, p.175, quotes, without naming his source, 12d., increased to 14½d., as the cost of the copper; 4d. as the cost of fabrication and distribution; and 22d. as the rating of the coins; leaving the Crown 'a profit of 3½d. a pound, or 16 per cent on cost'. See also Craig, p.427.
63. Charles II: *A Proclamation enjoyning the Prosecution of all such Persons as shall make or utter any Farthings, Halfpence or Pence...with Private Stamps* (5 December 1674).
64. The figure of 11d. presumably represented the estimated worth of a coin, allowing for the cost of melting, though even so 5½d. a pound for copper seems improbably low. The rate of 22d. to the pound was evidently currently discussed (see note 62 above), but it appears safer to accept the rate of 19½d. as in the text, as this is calculated from figures certified by James Hoare, Senior, comptroller of the Mint. See also note 73 below.
65. *CSPD* 1676-77, p.160. 66. *CSPD* 1676-77, p.250.
67. *CSPD* 1676-77, p.123; Historical Manuscripts Commission, *Report* 79 (Lindsey), p.176.
68. *CSPD* 1676-77, p.149.
69. John Collins, *A Plea for the Bringing in of Irish Cattel...* (1680), pp.13-14; John Collins, *Salt and Fishery* (1682), p.156.
70. *CTB* 1676-79, p.32; *CSPD* 1676-77, p.34.
71. *CSPD* 1676-77, pp.117, 123, 133, 142, 149-50.
72. *CSPD* 1676-77, pp.160, 191-92.
73. This absorbed 492,271 lbs. 4½ oz. of copper (*CSPD* 1676-77, p.202). The calendar also records that '£32,696.0s.8d. had been distributed and £7,561.16s.3d. remained in hand (sic)'. No farthings or halfpence dated 1676 are listed by Peck.
74. *CSPD* 1676-77, p.191; PRO, Mint 1/1, pp.176-78. Craig, p.176, incorrectly gives the date as 11 August.
75. *CTB* 1676-79, p.1051. 76. *CTB* 1676-79, pp.1266-67.
77. Craig, p.176, estimated the total at £55,000-£60,000, but he expressly based this on the Mint's forecast of output, which does not appear to have been realised.
78. There is no entry in Chandaman for profits from this coinage.
79. *CSPD* 1676-77, p.234.
80. *CSPD* 1676-77, pp.249-50, 482; cf. p.215.
81. *CSPD* 1676-77, p.215.
82. *CSPD* 1676-77, p.453; *CTB* 1679-80, p.802.
83. *CSPD* 1676-77, p.273. 84. *CSPD* 1676-77, p.453.
85. *CTB* 1679-80, p.802. 86. *CSPD* 1676-77, p.218.

87. *CSPD* 1676-77, p.234; *CTB* 1679-80, p.802.
88. *CSPD* 1679-80, p.158.
89. *CTB* 1679-80, p.802; The price of tin at the time was unusually low. 'Tin', remarked a contemporary, 'is now a drug by the plenty of it.' M[ark] L[ewis] D.D., *Proposals to the King and Parliament...or a Large Model of a Bank* (1678), p.10.
90. *CSPD* 1679-80, pp.158-59. 91. *CTB* 1679-80, p.803.
92. *CTB* 1679-80, pp.802, 603.
93. *CSPD* 1682, pp.177, 501; *CTB* 1681-85, pp.968-69, 991.
94. *The Economic Writings of Sir William Petty*, edited by C.H.Hull (Cambridge, 1899), II, 438.
95. Hull, p.445.
96. *To the Hon. the Knights, Citizens, and Burgesses in Parliament Assembled: The Humble Petition of Abjohn Stokes, Esq.* [1690?].
97. PRO, Mint 1/1, pp.185-86. 98. *CTB* 1681-85, p.1122.
99. *CTB* 1681-85, p.1122; PRO, Mint 1/1, p.190.
100. *CTB* 1681-85, p.1206; *CTB* 1685-89, p.1622.
101. *CTB* 1681-85, pp.1460-61. 102. Craig, p.178.
103. Craig, p.179. 104. *CTB* 1685-89, p.1623.
105. *CTB* 1685-89, pp.1981, 2027; *Calendar of Treasury Papers* (hereafter *CTP*) 1556-1696, p.28.
106. *CTB* 1685-89, p.1981. 107. *CTB* 1689-92, p.771.
108. *CTP* 1556-1696, pp.25, 27. 109. *CTP* 1556-1696, p.28.
110. PRO, *Treasury Papers*, II, 39-40, cited Helen Farquhar, 'Portraiture of our Stuart Monarchs on their Coins and Medals, Part II: James II,' *BNJ* 6 (1909), 238, 240.
111. *CTP* 1556-1696, p.28. 112. *CTP* 1556-1696, pp.29-30.
113. *CTP* 1556-1696, pp.28-29. 114. *CTP* 1556-1696, p.33.
115. Peck, p.155. 116. *CTB* 1689-92, p.53.
117. *CTB* 1689-92, p.1045; BL, Additional MS 6836, No.16, pp.84-90, cited Helen Farquhar, 'Portraiture of our Stuart Monarchs on their Coins and Medals, Part III: William and Mary,' *BNJ* 7 (1910), 233.
118. *CTP* 1556-1696, p.80. 119. *CTP* 1556-1696, p.95.
120. *CTP* 1556-1696, p.111. 121. *CTP* 1556-1696, p.224.
122. *CTP* 1556-1696, p.109. 123. *CTB* 1689-92, p.380.
124. *CTB* 1689-92, p.1105. 125. *CTB* 1689-92, p.1152.
126. *CTB* 1689-92, p.1478. 127. *CTB* 1689-92, p.1211.
128. *CTP* 1556-1696, p.224. 129. *CTB* 1685-89, pp.1622-24.
130. *CTB* 1703, p.369.
131. BL, Harleian MS 7404, cited Ruding, II, 32, note 3.
132. A report by Godolphin dated 14 March 1692 (*CTP* 1556-1696, p.224) quotes the value of the output since Lady Day 1684 as £59,000, and the profit

- to the Crown as £21,000. The difference between these figures and those in the text may be explained by the fact that the second account of the original commissioners had not been rendered when Godolphin reported. Chandaman, p.361, shows a revenue from farthings totalling £16,442 for the period Michaelmas 1684 to Michaelmas 1688.
133. *CTB* 1702, p.296. 134. *CTP* 1556-1696, p.365.
 135. *CTB* 1689-92, p.1477. 136. *CTP* 1556-1696, p.249.
 137. *CTB* 1693-96, pp.39-40. 138. *Craig*, p.182.
 139. *CTB* 1693-96, p.69.
 140. Narcissus Luttrell, *A Brief Historical Relation of State Affairs from September 1678 to April 1714* (Oxford, 1857), III, 67.
 141. *CTB* 1693-96, p.69. 142. *CTB* 1693-96, p.93.
 143. PRO, Mint 1/1, p.193. 144. *CTB* 1693-96, pp.103-104.
 145. *CTP* 1556-1696, p.286. 146. *CTB* 1693-96, p.330.
 147. *CTB* 1693-96, p.415.
 148. His writings include *A Method for an Immediate Coinage...* [1695]; *A Proposal for a Fund...*[1695]; *Proposals humbly offered...for preventing Clipping, Coining, &c.* [1695].
 149. *CTB* 1693-96, p.459.
 150. Luttrell, III, 224, 240, 245, 246, 292, cf. II, 359.
 151. *Journals of the House of Commons* (hereafter *JHC*) XI (1693-97), 125, 144.
 152. *JHC*, XI, 163, 170. 153. *CSPD* 1694-95, p.125.
 154. *CTB* 1693-96, pp.666-67. 155. *CTB* 1693-96, p.688.
 156. *CTB* 1696-97, p.226.
 157. *The case of several tradesmen and dealers in and about the City of London...* [1696?] (hereafter *The case of several tradesmen*).
 158. *CTB* 1693-96, p.796. 159. *CTB* 1693-96, p.826.
 160. *CTB* 1693-96, p.953. 161. *JHC*, XI, 388.
 162. *JHC*, XI, 545-49. 163. *Craig*, p.416.
 164. *CTP* 1556-1696, p.555.
 165. *The case of several tradesmen; also Proposals to the Parliament for Redress of the Common Calamity...* (1696).
 166. *CTP* 1556-1696, p.365. 167. Houghton, under dates cited.
 168. *JHC*, XI, 549. 169. *CTB* 1696-97, p.11.
 170. *The case of the contractors for making and vending copper halfpence and farthings* (1696) (hereafter *The case of the contractors*, 1696).
 171. *CTB* 1696-97, p.11. 172. *CTP* 1556-1696, p.509.
 173. *The case of the contractors for making copper halfpence and farthings* [1699] (hereafter *The case of the contractors*, 1699). *CTB* 1697-98, p.68. The figure of £200 implies that the tin coins contained on average only some ninety per cent of their nominal weight of tin. In fact, the report made to the Treasury in February 1698 (*CTB* 1697-98, p.68) showed that the average rating of the tin coins exchanged was 21.43 d. to the pound instead of the contractual 20d. to the pound.

174. *The case of the contractors, 1699.* 175. *The case of the contractors, 1696.*
176. *JHC*; XII (1697-99), 268. The Act was 9 & 10 William III, c.33; it received the royal assent on 5 July 1698.
177. *The case of the contractors, 1699.*
178. *JHC*, XII, 651 (18 April 1699); *Journal of the House of Lords*, XVI (1696-1701), 458 (29 April 1699).
179. Peck, pp.171, 173. 180. *CTB* 1693-96, p.667.
181. *The case of several tradesmen.* 182. *CTP* 1702-07, p.123.
183. *CTP* 1702-07, p.337. 184. *CTB* 1693-96, pp.1324, 1436.
185. *JHC*, XI, 125. 186. Craig, p.193.
187. Sir William Beveridge and others: *Prices and Wages in England* (London, 1939), p.678.
188. N.W. Posthumus, *Inquiry into the History of Prices in Holland* (Leiden, 1946), p.377.
189. Lewis, p.256.
190. The number of tanners in 1697 was estimated at a minimum of 8,000, [T.Tresillian], *Aggravati Venetiani, etc...* (1697), p.7. The output of that year, a depressed year (*The Tanners' Grievances* [sic], 1697, *passim*), was the lowest of the decade (2,382,034 lbs.). This would give an average per man of something under 300 lbs. a year. The average output in the 1690s was 2,547,657 lbs. (Lewis, p.256). If Tresillian's estimate was valid for the whole decade, the average output per man was something less than 318 lbs. a year, which would have required the employment of a minimum of 273 men.
191. Whetter, p.196.
192. Elizabeth Boody Schumpeter, *English Overseas Trade Statistics 1697-1808* (Oxford, 1960), p.18.
193. Schumpeter, pp.19, 23. 194. Whetter, pp.195-98.
195. Whetter, p.192.

COMPUTATIONAL FRACTIONS OF THE GRAIN:
MITES, DROITS, PERIODS, AND BLANKS

Philip Grierson

In the seventeenth and eighteenth centuries it was customary, in mint reckonings of a very precise character, to use notional subdivisions of the grain called mites, droits, periods and blanks, each being alternately a twentieth or a twenty-fourth of the one above it. The earliest printed listing of them occurs in an appendix to James I's proclamation of his second coinage, dated 16 November 1604,¹ for a supposed earlier one of 1601 is a mistaken inference from an eighteenth-century text.² Their relationships are set out by Gerard Malynes in 1622 in his *Consuetudo vel Lex Mercatoria*, one of the best general handbooks of mercantile practice published in Europe during the seventeenth century:

'the Troy weight...(contains) twelue ounces, euerie ounce twentie penie weight, euerie penie weight twentie and foure grains, and euery grain twentie mites, euery mite twentie and foure droicts, euerie droict twentie periods, euerie period twentie and foure blanks'.³

The ounce, pennyweight and grain in this schedule were real weights and their relationships to each other were traditional, but the fractions of the grain were both imaginary and novel. They can be set out in tabular form.

1 grain	=	20 mites	=	480 droits	=	9600 periods	=	230,400 blanks
1 mite	=	24 "	=	480 "	=	11,520 "		
		1 droit	=	20 "	=	480 "		
				1 period	=	24 "		

We still use imaginary weights today. When the proclamation of 1604 gave the weight of the penny as 7 grains 14 mites 20 droits 2 periods 12 blanks, it was doing essentially the same thing as Schedule 1 of the Coinage Act of 1870 did in stating the weight of the sovereign as 123.27447 grains, for even though nineteenth-century balances could weigh much more accurately than their seventeenth-century counterparts, such tiny fractions can only be arrived at by long division. In King James's time the weighing of coins and precious metals was not normally taken beneath the troy grain (0.065 grams). This is shown by a 'Declaration of an order for the making of certain small cases for ballances and weights to weigh all manner of gold coins',⁴ itself reflecting the terms of a proclamation for establishing standard weights and measures of 16 December 1587.⁵ It was quite exceptional for a proclamation of 26 December 1632 on the distribution of standard weights by the Mint⁶ to provide for them going as low as a half-grain.

James Murray in 1896 started a brief correspondence on the notional fractions in *Notes and Queries*.⁷ They obviously represent an artificial

prolongation, to 'weights' below the grain, of the alternating 20/24 multiples in use just above it (1 ounce = 20 pennyweights, 1 pennyweight = 24 grains). Strange as they appear to us, they were, as he pointed out, not dissimilar to the decimal fractions that replaced them in the nineteenth century, for decimal fractions are only the sum of tenths, hundredths, thousandths, and so on. If the old Scottish Tron weight known as a 'drop' (1/16th of an ounce) can be equated with 37.588 troy grains, this means that it weighed 37 grains + 5/10ths of a grain + 8/100ths of a grain + 8/1000ths of a grain, while expressing it in the old measures as 37 grains 11 mites 18 droits 4 periods 19 $\frac{1}{2}$ blanks meant that it weighed 37 grains + 11/20ths of a grain + 18/480ths of a grain, etc. Decimal fractions have the advantage of being easier to handle, though since the last figure may be only an approximation to the nearest integer they may be less correct. Although Murray's correspondence brought to light some early examples which he was able to use for the entries in the *Oxford English Dictionary*,⁸ it did nothing to account for the terms themselves.

These in fact arose out of the need to devise specific terms for fractions in a world that was not accustomed to expressing any but the simplest fractions (three-quarters, one-eighth) numerically. The normal practice was to employ entities whose relationships to each other was well known. People spoke, for example, of an inch of an acre, meaning one-twelfth of an acre (there were twelve inches in the foot), or expressed the fineness of sterling silver (925/1000) as 11 ounces 2 pennyweights, i.e. 11/12ths (there were twelve ounces to the Troy pound) plus 2/240ths (there were twenty pennyweights in the ounce and so 240 in the pound). But if fractions of the grain were to be devised that continued downwards its pattern of alternating twenty and twenty-four multiples, it would be necessary to find suitable terms for them. *Mite* was an obvious first candidate, since it was already used for anything very small. The others, I would suggest, were chosen half in jest, for as written down they could be thought of as entities of diminishing magnitude, *droit* as a vertical stroke, *period* as a full stop (still 'period' in the United States), and *blank* as nothing at all. Possibly, indeed, the terms were taken over from the vocabulary of type-setters or type-cutters, for the skills of die-sinkers and type-cutters have much in common, but we know little of printers' technical vocabulary in this country prior to 1683 and this can be no more than a surmise. Let us consider the terms in order.

Mite. This word, as the citations in the *OED*, s.v. *Mite*^{1,2} make plain, was Indo-Germanic in origin and applied in Middle English to anything very small in size (as an insect, 'mite') or value (e.g., the widow's 'mite', *minuta* in the Vulgate, of Mark xii.43), though in the latter sense it was influenced by the Flemish/Dutch word *mijt*, used for the smallest denomination of low quality billon struck in the Low Countries from the fourteenth century onwards and worth 1/24th of the Flemish *groot*, the equivalent of a 'penny' in the accounting system. This did in fact provide a notional fraction, 1/24th of a penny, unknown to the *OED* and sometimes used in mint accounts: Sir Martin Bowes, for example, stated the profit on the minting of silver between 1 June 1544 and 31 March 1545 as 8s.8 $\frac{1}{2}$ d. 5 mites, the sum in fact ending 8 17/24d.⁹ It has been asserted that 'mite' was used in the later middle ages with the meaning of a precise weight, but the texts cited to this effect will not stand up to examination. One, Ruding's statement that the remedy laid down in the mint indenture of 4 December 1343 for the striking of Edward III's gold coinage was 'a mite of a carat' is a simple mistake, for the *mytisme* he quotes is a misreading for *oytisme*, i.e. *huitième*, and the remedy is an eighth of a carat.¹⁰ The other, used in the *OED* (s.v. *Mite*²) as evidence for the application of the word to a precise weight as

early as 1390, is a verse in John Gower's *Confessio amantis*¹¹ (v.4412: 'that scarsly wolde it weie a myte'), and in the context this means no more than 'something very small'. On the other hand, the evidence in favour of its computational use dating only from the sixteenth century is very strong, for no fraction, whether real or notional, is mentioned in any of the late medieval or early sixteenth-century treatises on weights and measures that have survived,¹² and Robert Record in *The Grounde of Artes*, the most influential work on mathematics published in England in the sixteenth century, asserts firmly that no weight below the grain was in normal use.¹³ Its introduction presumably took place at the same time as the adoption of terms for the other fractions, and its common meaning of 'something very small' made it a natural choice.

Droit. This, if my suggestion is correct, would be French *droit* (from Lat. *directum*) in the sense of 'upright', as in such phrases 'se tenir droit', '*il est droit sur ses pieds*', '*droit comme un I*'. Although this sense is not recorded in English, there is nothing against the hypothesis of a borrowing from French, as occurred with *blank*. Whether it was also a typographical term, as were *period* and probably *blank*, we do not know, for there is no technical work in English on typography earlier than that of Moxon of 1683.

Period. This appears in the sense of 'full stop' in a religious poem published in 1609, and the way in which it is used shows that by that time it formed part of the common speech.¹⁴ It was indeed the normal term used in English up to the nineteenth century, when it came gradually to be replaced by the current 'full stop'. See *OED*, s.v. *Period* 11b.

Blank. This term was applied in English to the white circle in the centre of a target (*OED*, s.v. *Blank* 5b.2), and was thus something smaller than a surrounding black circle, but in its computational sense it is more likely to have been suggested by typography. The normal seventeenth-century English term for what Moxon in 1683 terms the 'white between words' was 'space',¹⁵ as it still is today, but *blank* may have been used earlier, as *blanc* is for such a space in French.

When and how did the use of these terms for fractions of the grain originate? The earliest printed reference to them that I have found is in the proclamation of 1604 already referred to. Their presence there apparently arose out of a wish to display the English system side by side with the Scottish one, which used twenty-fourths consistently and was borrowed from France.¹⁶ But there are earlier manuscript sources, rather confusedly cited in the *OED*, going back to the third quarter of the sixteenth century.

The two earliest both occur in the remarkable collection of sixteenth- and early seventeenth-century Mint documents and memoranda which are bound up together as Harleian MS 660 in the British Library.¹⁷ No.25 (fos. 76–85) in this, a 'Treatise or Discriptyone of things cheefly appertayning to the Mintage' is by William Humfrey, a London goldsmith and assayer to the Mint, and gives essentially the same breakdown of the grain as Malynes was to do (fo.81v: 'Euery subtylle grayne (doth) contayne 20 mytes...'). The work is undated but must have been written before 1579, when Humfrey died.¹⁸ The same definitions are given in another work (No.38, fos.107r–114r) in the same volume, a memorandum by Sir Francis Knollys prepared shortly after the completion of the Great Recoinage for submission to a royal commission on the exchanges consisting of the Lord Treasurer (William Paulet, Marquess of Winchester), Sir Francis Knollys, Sir Walter Mildmay, and Sir William Cordalle. It is entitled 'A Confferrence of the waigtes of Bullyone and vallues of the syluer moneyes of England, and the syluer moneyes of

the Lowe Contreyes, with a Comparysone of the Exchanges used to and froe betweene the Burse of Anwarpe and Lumbardestreete in London', and is dated February 1564 of the seventh year of Elizabeth, i.e. February 1565. The substance of this lengthy and important document was printed in 1924 by Tawney and Power,¹⁹ and it has been widely quoted by subsequent scholars, but the list of fractions of the grain occurs in the preliminary section intended to establish the mint par of exchanges between English and Flemish currencies, and Tawney and Power omitted the detailed calculations of this section as being too technical in character. The pattern of fractions was thus at least well established by the 1560s, but how much further back it goes is difficult to say. It may have been devised because the repeated debasements of the mid-century had forced the Mint to indulge in minuter calculations than had been required in earlier times, though on the other hand precision, with debased coins, is a less important consideration.

How long did these fractions remain in use? It is hard to say, partly because of their unreality, partly because they virtually represented the 'house practice' of the Royal Mint and were little used outside it - Malynes had close relations²⁰ with the Mint and the Royal Exchange, though his claim that his father was a moneyer seems to be fictitious - so that they make only very occasional appearances in printed documents. A table largely coinciding with that of King James's proclamation was appended to the act of parliament of 17 July 1649 (cap.43) ordering the new coinage for the Commonwealth,²¹ and they are usually noted in the dictionaries and descriptive works that began to proliferate from the mid seventeenth century onwards - Thomas Blount's *Glossographia*,²² Phillips' *New World of English Words*,²³ Morden's *Geography Rectified*,²⁴ Bradley's *Family Dictionary*²⁵ - although Samuel Johnson, with his more literary bias, ignored them all. As late as the nineteenth century some authors of handbooks on coinage or weights and measures still thought it incumbent on them to explain what they were, while admitting that in actual calculations they had long since been displaced by decimal fractions of the grain.²⁶ There was, particularly in their later stages, considerable uncertainty as to how they should be spelled, *period* being often *periot*, *peryoit* or *perrit*, and *droit* being often rendered *doit* through confusion with the name of a Low Country copper coin (Dutch *duit*; English *doit*) familiar in this country from the sixteenth century onwards. By the eighteenth century they were, effectively, dead.

NOTES

1. R.Ruding, *Annals of the coinage of Great Britain*, third edition (1840), I, 362; full text in *Stuart Royal Proclamations*, edited by J.F.Larkin and P.L.Hughes (Oxford, 1973), I, no.47, pp.99-103.
2. *OED*, s.v. *Droit*, from a table headed 'Weights of Silver Coins 43 Eliz. 1601', in J.Millan, *Coins, weights and measures Ancient and modern, of all nations. Reduced into English on above 100 tables* (1747), p.7. Millan was giving the theoretical weights of the silver coins of his own day, and the reference is due to the fact that these still conformed to the standard introduced '43 Eliz, 1601'.
3. *Consuetudo vel Lex Mercatoria, or the Ancient Law Merchant* (1622), p.292.
4. H(umphrey) D(yson), *A Booke Containing All Such Proclamations as Were Published During the Raigne of the late Queene Elizabeth* (1618), p.258.

5. *Tudor Royal Proclamations*, ed. P.L.Hughes and J.F.Larkin (New Haven and London, 1969), II, no.695, p.547.
6. Ruding, I, 386. The proclamation is no.1652 in R.Steele, *A Bibliography of Royal Proclamations of the Tudor and Stuart Sovereigns*, I (Bibliotheca Lindesiana, V. Oxford, 1910).
7. J.A.H.Murray, 'Subdivisions of the Troy Grain', *Notes and Queries* 8th ser. 10 (1896), 255, 278-79, 338-39, the second consisting of comments by the clerk of the Royal Mint.
8. *OED*, s.v. Blank (sb.10), Droit 2, Mite 2, Perit.
9. C.E.Challis, 'The Debasement of the Coinage, 1542-1551', *EcHR* 2nd ser. 20 (1967), Table on p.463, note. The value can be worked out on internal evidence. I am grateful to Dr Challis both for calling my attention to this use of the word, which I had missed, and for other information and much help generally in the final drafting of this paper.
10. Ruding, I, 217. It is correctly given as one-eighth in the summary of the document in the *Calendar of the Close Rolls, Edward III, A.D. 1343-1346* (1904), pp.261-62.
11. *The English works of John Gower*, edited by G.C.Macaulay, 2 vols. Early English Text Society. Extra Series LXXXI.LXXXII (Oxford, 1900-1), II, 67.
12. *Select tracts and table books relating to English weights and measures (1100-1742)*, edited by H.Hall and F.J.Nicholas. Camden Miscellany, vol. XV. Royal Historical Society, Camden Third Series, vol. XLI (London, 1929).
13. Robert Record, *The Grounde of Artes* (London, 1542) reprinted in the series *The English Experience*, No.174 (Amsterdam and New York, 1969). The correct date of the original edition should be 1543, not 1542 as on the title-page of the reprint.
14. John Davies (of Hereford), *The Holy Roode, or Christes Crosse*, p.20, col.2, edited by A.B.Grosart in vol.I of Davies' *Complete Works* (Chertsey Worthies' Library, Blackburn, 1878): 'No Commaes but thy Stripes; no Periods / But thy Nailes'.
15. J.Moxon, *Mechanick Exercises on the Whole Art of Printing* (1683-4), edited by H.Davis and H.Carter (Oxford, 1958), p.207.
16. Cf. R.W.Cochran-Patrick, *Records of the Coinage of Scotland* (Edinburgh, 1876), I, lxxxiii, with a comparative table of the Scottish and English systems from a Hopetoun MS of the period of Charles I. The fractions are termed *primes* (1/24th), *seconds* (1/576ths), *thirds* (1/13,824ths) and *fourths* (1/331,776ths).
17. *A Catalogue of the Harleian Manuscripts in the British Museum* (1808), I, 398-400.
18. C.E.Challis, 'Mint officials and moneyers of the Tudor period', *BNJ* 45 (1975), 62.
19. R.H.Tawney and Eileen Power, *Tudor Economic Documents* (London, 1924), 346-59. There are other copies, not used by the editors, in Rawlinson MS D.23 in the Bodleian (*Catalogi Codicium Manuscriptorum Bibliothecae Bodleianae*. Part V, fasc.3, edited by W.D.Macray (Oxford, 1893), coll. 14-15), and in the library at Penshurst (*Historical MSS Commission, Third Report* (1872), 230). The last of these gives the name of the author.

20. R.de Roover, 'Gerarde de Malynes as an economic writer. From Scholasticism to Mercantilism', in *Business, Banking and Economic Thought in Late Medieval and Early Modern Europe*, edited by R.Kirshner (Chicago and London, 1974), pp.346-66, esp. pp.346-48.
21. Ruding, I, 411. The full text is in H.Scobell, *A Collection of Acts and Ordinances of General Use made in the Parliament* (London, 1658-7), II, 64-65.
22. T.Blount, *Glossographia* (1656 etc.), s.v. Ounce.
23. E.Phillips, *The New World of English Words* (1658), s.v. Perit.
24. R.Morden, *Geography Rectified, or, A Description of the World* (1680), p.175.
25. Chomel's *Dictionnaire oeconomique, or The Family Dictionary*, revised by R.Bradley (1725), II, s.v. Weights.
26. E.g., J.Ede, *A view of the gold and silver coins of all nations* (1808), p.64; P.Kelly, *Metrology; or an exposition of weights and measures, chiefly those of Great Britain and France* (1816), p.85, and in his more famous and comprehensive work, *The Universal Cambist*, second edition (1835), I, 219.

THE PROPOSED ROYAL ACADEMY MEDAL OF 1793

T.Stainton

Although it is quite clear that this medal was never issued in the manner intended, the fact that its preliminary stages are described at such length in the Farington Diary¹ entitles it to some notice. Though only a fragmentary tale, it takes us into a world where medals were regarded very seriously. The twenty-fifth anniversary of the Royal Academy fell on 10 December 1793, and a general meeting was called a week later to reach final agreement on the manner of celebration. It was Farington himself who put the formal proposals to the meeting, namely that they should hold a special Academy dinner; present a loyal address to their patron, King George III; and make arrangements to have a medal struck - proposals which were unanimously agreed.² The dinner and the address were duly attended to, and the matter of the medal was set in motion. After some three years of hesitant progress the official order for the medal dies was finally given to Lewis Pingo on 31 December 1796, conditional on his completing within the coming year.³ The mystery of what happened after that, and why the medal failed to appear, is difficult to unravel.

The Academy records contain no reference at all to the medal after the placing of the Pingo order.⁴ Unfortunately, the Academy possesses no collection of its early medals, and little attention has been given to them. It is not surprising, therefore, that in the official history of the Academy⁵ published in 1968 the author mistook, as it now appears, the intention for the accomplished fact, and stated that 'in 1793 there were celebrations to commemorate the Academy's twenty-fifth anniversary. A medal by T.Pingo was struck, examples in gold being given to the Royal Family and in silver to the Academicians and Associates'.⁶ It was this statement that prompted me to search for the medal. According to Farington the intention was to strike four specimens in gold and sixty-five in silver.⁷ With a mintage of this size, and a prestigious medal, it is unthinkable that one or more examples should not have survived. The early nineteenth-century collectors were extremely active, and we should certainly expect to see a medal of this era listed in the sale catalogues; and eventually to find its place in such works as Forrer, Colonel Grant's List, and Laurence Brown's recent catalogue.⁸ Further, we should expect an example to have found its way to the British Museum,⁹ or possibly to have remained in the royal collection at Windsor, which we know was examined by Brown.¹⁰ The fact that no trace of the medal has emerged is to my mind conclusive proof of its non-existence.

Having reached this conclusion we return to Farington. His later allusions to the medal are few and cryptic. On 12 April 1797 he noted: 'Marchant called - saw Pingo today who says Burch's model will be of no use to him'. A year later, when the dies were already overdue, he wrote on 15 April 1798: 'Marchant in evening. Academy medal not a 3rd done'. Clearly progress was slow. These laconic entries need some explanation.

The design chosen for the medal was one put forward by Robert Smirke. A twelve-inch model was subsequently prepared by Smirke himself from which a reduction of medal size was later made by Edward Burch; and both these models were handed to Pingo to copy when he was given the order. It should also be explained that Nathaniel Marchant, the celebrated gem-engraver and an associate member of the Academy since 1791, was appointed to the Mint in 1797, and from that time must have been in regular touch with Pingo. He was thus the natural retailer of Mint news to Farington and to Academy circles, and was at this period a frequent caller at Farington's home. I have found only two later entries relating to the medal, many years afterwards, and both referring to Academy Council meetings. On 8 February 1804 Farington noted: 'The Commemoration Medal was talked about'; and on 16 February 1805; 'I also requested that something might be done respecting the Commemoration Medal'. These entries, with our other evidence, leave no doubt that the medal project, after a total span of some eleven years, was still uncompleted in 1805, and was likely to remain so. How far Pingo finally progressed with the dies remains uncertain, but it is clear that the medal was never struck in quantity as originally planned.

What was Pingo's problem? Was he overworked, or was it a matter of failing powers or confidence? Or did he simply dislike this particular medal? Pingo was born in 1743, and his rather limited output of medals belongs to his early or middle years. Although he continued as chief engraver at the Mint until 1815, his work on medals almost ceased after 1790. The last medal listed by Forrer is the St Paul's medal of 1789.¹¹ Brown also, correctly, gives him the Manchester Church and King Club medal of 1790.¹² We know from Farington, if not otherwise, that Pingo also engraved the dies for the 'Naval Gold Medal' issued in 1796 to honour Earl Howe and his captains at the battle of First of June 1794.¹³ Farington wrote on 22 December 1796: 'Lewis Pingo I met at Smirke's. He asks 150 guineas for engraving the Commemoration medal which would take him 6 or 7 months - will finish it by November next - had from the Admiralty 150 guineas for the medal in honor of 1st of June'. The naval medal is unsigned and I have not previously seen it attributed to Pingo,¹⁴ though Forrer came close to the truth when he listed an impression of its reverse among the Pingo relics that he examined in the Bousfield collection.¹⁵ It was perhaps the last of Pingo's medals. His figure of 150 guineas is astonishing for the time, and indeed astonished the Academy, though they felt obliged to accept it. In 1793 Marchant had been consulted about the costs of the Academy medal and had then advised them to allow £40 for cutting the dies.¹⁶ He later told Farington, 22 December 1796, that he believed Pingo originally only wanted fifty guineas. Clearly Pingo's success with the Admiralty encouraged him to re-appraise himself in the intervening period. However, his apparent abandonment of medal work in these years looks deliberate, the Admiralty medal being less avoidable since it was an official order on the Mint rather than a private commission. It is therefore possible to see his exorbitant quotation as a diplomatic attempt to lose the job.

It is impossible to assess Pingo's day to day work load at the Mint. Apart from responsibility for the dies there must have been other duties in running the department. There is occasional evidence of his working for other government departments such as the Stamp Office and the Excise Office.¹⁷ There was also work of some kind on his own account, for in a letter of 20 July 1801 Morrison remarked that 'as an artist of ability Mr Pingo has generally much private work in execution, and to obtain business for the Office...it becomes needful to urge him to dispatch'.¹⁸ The impossibility of holding Pingo to promised dates, and the constant need to 'urge him to dispatch', occur again and again in the Mint records at this time. No doubt

he was a conscientious and busy servant of the Mint, and familiar with all departmental aspects, but when it came to the artistry of engraving we really know nothing to be proud of in these later years. The deterioration in his performance is obvious, and his slowness and hesitancy were more likely to have been due to an awareness of this decline than to genuine pressure of work. Two contemporary passing views on Pingo in 1806 are worth noticing. Lord Charles Spencer, the master, stating a case to the Treasury for an increase in Mint salaries, wrote of Pingo: 'In giving credit to the present Officer for his knowledge and experience in coinage as a Steel Engraver, I believe I shall be justified by the opinion of the Office and every competent person. Of how great an importance it is to have an Artist of celebrity at the head of the Department may be inferred from the temptation...held out to a foreign Engraver to accept it at the restoration of Charles the Second'.¹⁹ Spencer's words were in fact chosen with some care, and it was wrong of Banks to misconstrue them in his memorandum to the Coin Committee: 'In representing the present Engraver as an Artist of Celebrity the Master gives a sad specimen of his taste'.²⁰ If Banks was at this time impatient with the Mint and with Pingo in particular it is fair to recall his letter to Pingo of some twenty years earlier expressing high satisfaction with the Captain Cook medal of 1784 for the Royal Society.²¹

The Academy medal presented its own problems in the three-way division of artistic responsibility between Smirke, Burch, and Pingo, an arrangement that was perhaps unwise. It was a condition of the order that the dies should be 'executed under the direction of Mr. Smirke, and subject to the inspection of the Council of the Royal Academy'.²² Smirke reported to Farington in January 1797 that Sir Joseph Banks had told him that 'Pingo had been with him and brought with him Smirke's model for the Commemoration Medal. He [Banks] remarked on Pingo being a weak man, and that he had foolishly said he should make many alterations from Smirke's model when he came to execute it'.²³ We have already noticed Pingo's dissatisfaction with Burch's model. The combination of Smirke's inexperience as a modeller, Burch's failing eyesight, and Pingo's powers of procrastination if nothing else, was unpromising. Under all these circumstances, even though our speculations may be wrong, the non-completion of the Academy dies need not entirely surprise us.

Nathaniel Marchant's function at the Mint has never been clearly explained,²⁴ nor why an artist of the standing that he had attained as a gem-engraver should wish to take lowly employment there under the official title of 'Apprentice or Probationer under the Chief Graver'.²⁵ This question puzzled Pingo at the time. When the vacancy arose after John Milton's dismissal Marchant's application for the post was in due course received by the master, Sir George Yonge. Enquiries were made and James Morrison, the deputy-master, reported to Yonge on 14 March 1797 that he had 'mentioned the business to Mr Pingo who speaks highly of him as a Stone Engraver, and his situation such that he is sure he will not undertake the business of the Mint, when he is made acquainted with its nature and the circumstances. Mr Pingo is well intimate with him, he purposes calling on him in a day or two'. Whatever Pingo may have said to him Marchant was not dissuaded, and confirmed his application to the master on 21 March.²⁶ On the twenty-third Farington wrote:

Marchant came in evening - he is appointed Assistant to Pingo the engraver to the Mint, in the room of Milton, who is discharged for having engraved a die to cast Louidores for a Frenchman - the place is £80 a year. Humphry recommended Marchant to Sir George Yonge. Marchant consulted Lord Spencer about accepting the offer. His Lordship advised

him to take it as, if he chose, he might at any time give it up. Perhaps, said his Lordship, you may see me in the Tower in a little time. Lord Carlisle advised him to take the place, 'I am an Old Politician', said his Lordship, 'and know it is well to have a foot on the ladder, you may rise from that situation to another'.²⁷

Marchant was now in his late fifties. His great days as a gem-engraver were past or passing, due to his years, and to changing taste and fashion.²⁸ He was evidently anxious to attach himself to the establishment for reasons of prestige and security, and viewed the Mint appointment as a rung or stepping-stone, as did his noble counsellors. To Pingo the easy relations that Marchant enjoyed with the nobility and men in power must have seemed unwelcome attributes in the junior member of his department. Even the master was somewhat awed, for when in January 1798 Marchant applied to him for undue favour in the allocation of engravers' accommodation, Yonge found it hard to say no. Debating the matter with Morrison, he wrote: 'His connexion and personal acquaintance with Mr Pitt, Lord Spencer, Sir Joseph Banks, Sir John Musgrave, Sir Richard Worsley, Mr Rose, and many others, besides myself, as well as his own merits and talents, entitle him to every regard'.²⁹ As it happened this argument carried no weight with Morrison who retorted sharply: 'As Mr Marchant has shown neither ability nor inclination to render service to the Mint, the plea of merit is put out of the question'.³⁰ No doubt Morrison preferred to judge by results rather than by promise or airy talk. When Thomas Major died at the end of 1799 Marchant took over his posts as engraver of his majesty's seals, and engraver to the Stamp Office, appointments which had been more or less reserved for him as early as 1797 by George Rose of the Treasury.³¹ These positions were not sinecures, and the time that he could devote to the Mint must have been seriously diminished. His attendance at the Stamp Office appears to have been fairly regular, and the fact that he had to find sureties indicates the extent of his responsibility there.³² The Stamp Office provided him with accommodation at Somerset House, and it was there that he lived until his death in 1816.³³

On joining the Mint in 1797 Marchant must have turned his hand seriously to engraving in steel. Perhaps his earliest exercise in the art was his ambitious portrait of the king. On 18 June 1798 Farington noted that he had breakfasted with Marchant, and had been shown a 'King's head in Steel which he is working - C.Greville³⁴takes much interest in it - and is a member of Privy Council - to which it is to be referred, with others, in a week'. At that time the Privy Council Coin Committee were receiving evidence; the Royal Academy had been invited to make submissions on coin design;³⁵ and a team from the Mint was due to attend on 5 July with coin specimens and models. On that day Marchant arrived independently and handed in a plaster impression and a lengthy letter: 'I presume to submit to your Lordships an Impression of a Die which I have nearly finished of His Majesties profile in size and relief calculated for a crown piece. In so doing I consider myself sanctioned by the orders of your Lordships, without which, in the inferior station I hold in the Mint, I could not be justified in executing such a work, as I have been informed by the Superior Officers of that Department'. He went on to state that he had brought the die with him, though unfinished, 'that I may silence the insinuations of those who have said that I cannot work in steel', and then described the further stages needed to perfect the die.³⁶ His submission was duly minuted by the Committee. By October the die was finished. Permission was obtained, as the rules required, to use the Mint die press: 'by request of Mr Marchant Probationer Engraver, Two Medals to be presented to the Privy Council'. On 3 October 1798 Farington noted the unhappy result: 'Marchant

called. His Dye of the King broke'.³⁷ Marchant's response to this setback is not known, but late in 1800 the government proposed to issue an official 'Union Medal' to mark the forthcoming union with Ireland on 1 January 1801, and Marchant was nominated to design and engrave the dies under Mint auspices. His carefully prepared drawings for the medal are preserved in the Mint records and show his well-known portrait of the king, with an allegorical reverse of the three kingdoms.³⁸ But the initial urgency was soon spent, it seems, and what little time Marchant was prepared or able to give to the Mint in the next two or three years appears to have been devoted to perfecting the head model and working on the obverse die. Progress became imperceptible, and the Mint officers, anxious that either Pingo or Marchant should produce a new head for the coinage, saw little to choose between them. The tortoise race was eventually settled by Pingo copying Marchant's portrait model for the gold coinage of 1804.³⁹ The union medal must have died in Marchant's hands, for there is no trace of it today. If we read the evidence correctly, the obverse die was all but ready in 1803, and the reverse had not then been started.⁴⁰ Marchant's recurrent ill health from 1803 must have contributed to the death of the project.⁴¹

As Pingo had doubtless foreseen, Marchant's appointment to the Mint was in many ways a mistake. He had neither the experience nor perhaps the will to be of day to day assistance in the department. His apparent independence of action and his direct access to government circles cannot have endeared him to the Mint. If, as may well be, there were hopes that he would re-invigorate the engraving department with new ideas and designs they were largely unfulfilled at this period, though it is fair to say that his strong, overtly classical portrait of the king was a successful and timely modernization of the royal effigy, beside which Pingo's later attempts were insipid and old-fashioned to say the least.⁴²

Unfortunately Smirke's chosen design for the Academy medal is now lost, unless by chance it survived in some form in the Bousfield collection mentioned previously, and still exists unrecognized. This is an important possibility. Allusions to the design in Farington are always in the singular, and presumably refer to the imaginative reverse. For the obverse portrait of the king they already had Thomas Pingo's die of 1770, or perhaps intended to use or copy Burch's head of 1785.⁴³ Two remarks of Farington's would be helpful in recognition. On 22 March 1794 he wrote: 'Smirke's design for the Medal was approved of last night by the Committee. West suggested that something should be added to signify the relation the figure representing the Royal Academy had to the emblems of Painting, Sculpture and Architecture. Smirke thought the idea frivolous, but it was not opposed and passed'. Three years later Farington wrote of Banks (8 January 1797) that 'Sir Joseph remarked on Smirke's Academy Model that he had made Time a sort of Herculean figure, instead of representing him Old. It seems Sir Joseph has only the puerile idea of Time decrepit and with a Scythe; not recollecting that Time is coeval with eternity, or something like it'. Other Academy members who submitted designs at the meeting in July 1794 were John Bacon, Richard Cosway, and John Rigaud. President West had withdrawn his, and it was only months later that Nollekens came forward with a design but was ruled out of time. The final voting went narrowly in favour of Smirke's submission, and in preference to Bacon's 'Britannia embracing Minerva'. It was then decided that Smirke's winning design should be modelled in large at about twelve inches diameter; and Smirke, not generally thought of as a modeller, surprised the assembly by undertaking it himself.⁴⁴ His model was ready in the following March, and received approval in general meeting in April 1795.⁴⁵ It was no doubt Smirke's success with the Academy medal that induced Banks to consult him on the design of

the Rumford medal for the Royal Society.⁴⁶ As it finally appeared the medal is a rather plain one, but it was apparently Smirke who suggested the device of a tripod and flame, appropriate since the medal was intended to promote the study of light and heat. Later we learn from Farington, 25 May 1807, that Smirke was commissioned 'to make a design for a Medal in Commemoration of the Abolition of the Slave Trade; on one side to be a head of Mr. Wilberforce; and on the other an appropriate subject'. There can be no doubt that this was the well-known and handsome medal issued in 1809, and engraved by Thomas Webb of Birmingham.⁴⁷

Benjamin West, the Academy president, wasted no time in the matter of the medal design, for within a fortnight of the original meeting he invited Farington to call. 'He showed me', Farington wrote on 30 December 1793, 'a design he had made for the medal. On one side the King's head, on the other Painting, Sculpture and Architecture, represented by three Figures'. There is no difficulty in recognizing this as the drawing now preserved in the Ashmolean Museum. It is not an adventurous design, but has the merit of directness and simplicity. It was rather characteristic of the president to put himself forward and assume to himself the honour of designing the medal. The Academy members also saw it in that light, and felt that a wider competition was called for. They apparently shamed West out of it, for Farington wrote on 14 April 1794 that 'probably the cause of West giving up the competitorship for the design of the Commemoration Medal was being told by Bourgeois that Northcote said he ought not to grasp at or expect every honor; that the Academy had clothed him with a robe of velvet, but that he should not struggle for every stripe of ermine'. The excessive self-regard to which Northcote was here pointing was one of West's irritating little failings, though all in all during his long presidency there were few serious challenges to his supremacy. Many proofs can be found of West's recurrent interest in medals, and in 1815 he took the unusual step of commissioning a medal of himself.⁴⁸

Having settled the design of their medal the Academy had the task of choosing a die-engraver. The choice was, as always, limited. Among their own members, where they would naturally prefer as a point of honour to keep the work, the only person qualified was Edward Burch, an academician since 1771, and formerly an outstanding modeller, gem-engraver, and miniaturist. Indeed he had been Marchant's master. Burch had some experience of cutting dies for he had engraved two medals by royal command for Göttingen University in 1785 and 1788.⁴⁹ The problem was that his powers were failing.⁵⁰ It was decided to invite competition, and Burch, Pingo, and John Milton were asked to 'send specimens of their ability and express if they were willing to undertake it as candidates'.⁵¹ All three did so, and on 31 July 1795 the Academy Council assembled to make their selection. On that day Farington wrote:

It was the general opinion that in Burch's Hanoverian medal more knowledge of the art is expressed than in any of the others produced. The doubt was whether Burch is now capable of executing with the same degree of ability. That medal was executed in 1785. The specimens of modelling which Burch sent to the last Exhibition were very inferior to his former productions. It was at last moved and carried unanimously that Mr Smirke's model be delivered to Mr Burch and he be requested to make a model and accurate copy of it the same size of the Hanoverian medal, and that he deliver his model to the President to be considered by the Council. Bacon, in reply to an observation of mine, said it had been an affectation in Burch to make his legs and feet small, with a view to increase the effect of the body of the figure.

Burch was thus given every chance to prove his ability without the Academy committing itself. Eighteen months later, when the model was ready, Burch removed all embarrassment by declining to cut the dies. In Farington's words (17 December 1796), '3 years ago he was able to have done it, but does not now think his eyes and hands fit for such business'. The commission then, as we have already seen, went to Pingo.

It is interesting to consider, as we can do, what other die-engravers of proven ability were available at this time. In London the gem-engraver W. Barnett had recently issued on his own account two medals of some merit, one a tribute to the Prince of Wales, the other to Earl Howe.⁵² That they had been noticed is clear from some opinions of Marchant's encapsulated by Farington on 22 December 1796, at a time when the choice of an engraver was in their thoughts: '[Pingo's] medal done for the Admiralty is very bad. Milton is a bad engraver - Barnett⁵³ neat - this branch of art is at a low ebb in England'. Whether or not Barnett was invited to compete, we can agree with Marchant's verdict on him: the medals are indeed neat and skilful, if somewhat mannered. Perhaps the only other possibility was C.H. Küchler, now working for Matthew Boulton in Birmingham. He may have been too far away, or too fully engaged, to be considered in 1796, but in June 1795 Farington had noted that 'Lysons recommended to me the Medals of Bolton of Birmingham, and thought he would do the Academy medal well', and a fortnight after that Boulton sent Lysons some sample medals to show their quality.⁵⁴

There is one other Royal Academy medal that failed to materialize. For their fiftieth anniversary in 1818 they again proposed to have a medal struck. The drawings prepared for it by John Flaxman are described and illustrated in the catalogue of the Flaxman exhibition held at the Academy in 1979.⁵⁵ But the project was abandoned, perhaps due to the death of the king which would have necessitated changes in the design, and engaged the Mint engravers on other matters. The apparent conclusion, therefore, is that the only medals actually issued by the Royal Academy during the reign of George III were the two well-known prize medals, the 'Gold' and the 'Silver', both engraved by Thomas Pingo, and first struck in 1770 shortly after the foundation of the Academy in 1768.⁵⁶

NOTES

1. *The Diary of Joseph Farington*, vols I-VI edited by K.Garlick and A. Macintyre, and vols VII- edited by Kathryn Cave (New Haven, Connecticut, and London, 1978-), currently being published. All subsequent references are to this edition. Joseph Farington, R.A., 1747-1821, was not an important painter, but was influential in the direction of Royal Academy affairs. His diary, 1793-1821, is one of the vital documents for his time and circle. After its re-discovery in 1921 it was published in greatly abbreviated form as *The Farington Diary*, edited by James Greig, 8 vols (London, 1922-28).

Almost everyone named in this article has an entry in DNB, and where appropriate in L.Forrer's *Biographical Dictionary of Medallists*, for which reason I have not thought biographical notes to be necessary in general.

2. Farington, 17 December 1793; and for earlier discussion, see 16 December 1793.

3. Farington, 31 December 1796.
4. I am indebted to Miss C-A.Parker, Librarian at the Royal Academy, for permission to examine their records, and other assistance.
5. Sidney C. Hutchison, *The History of the Royal Academy, 1768-1968* (London, 1968), p.75.
6. A version of this statement appears in R.Kraemer, *Drawings by Benjamin West* (Pierpont Morgan Library, 1975), p.31. The author quotes the late Mr.James of the Academy as saying that the British Museum possesses an example of the medal. In R.C.Alberts's *Benjamin West: A Biography* (Boston, Mass., 1978), p.199, we are told that the medal was struck by Thomas Pingo and Sons. Both these versions clearly stem from the Academy's own misconception about the medal's existence, and confusion of Thomas Pingo with his son Lewis.
7. Farington, 18 December 1793, and 31 December 1796, on the mintage. The gold medals were intended for the King, the Queen, the Prince of Wales, and the Princess Royal (Farington, 17 December 1793).
8. M.H.Grant, 'British Medals since 1760', BNJ 32 (1934-37), 269-93; 33 (1938-41), 449-80. L.Brown, *A Catalogue of British Historical Medals, 1760-1960*, I (1980). Hereafter, Brown.
9. Mr Mark Jones, of the British Museum, assures me that no specimen is known there.
10. Brown, p.xii.
11. Brown, nos.312, 313.
12. Brown, no.344. The medal is signed D.I. - P.F. A press cutting of 11 December 1790, preserved in the Miss Banks collection in the Department of Coins and Medals at the British Museum describes the medal and states that it is just completed by Mr Pingo. No doubt this is Brown's source. A theory suggested by Brown that the signature M & P, or M & P FECIT, found on a few later medals (Brown, nos.625, 655-56, 1042) can be read as Marchant and Pingo will not bear examination. A commercial collaboration between these aging and probably incompatible artists cannot be imagined, and the medals are poor, unworthy things.
13. Marquess of Milford Haven, *British Naval Medals* (London, 1919), nos. 427, 428. And see extensive documentation in J.H.Mayo, *Medals and Decorations of the British Army and Navy*, 2 vols (London, 1897), I, 172-77.
14. Neither Milford Haven nor Mayo mention Pingo, nor does the designer appear to be known if other than Pingo. The dies were at the Admiralty when Mayo wrote in 1897, and he adds that the name, R.Wood, is stamped on each. Perhaps the name of the die-forger, I would suggest. A letter of 12 March 1797 from J.Morrison to the master of the Mint (PRO, MINT 4/21) confirms the Mint origin and implies Pingo's authorship.
15. Forrer, IV, 558, under Thomas Pingo. Some or all of these relics were listed in a Sotheby sale catalogue of 28 July 1930, lots 211-13, as the property of Dr Stanley Bousfield. I have to thank Mr Hugh Pagan for this location. Lot 212 contained 78 die impressions 'nearly all by Lewis or Thomas Pingo'. Included by name is the 'large and small gold Naval Medal'. What happened to this important and precious collection, described there as 'most carefully identified and ticketed'?

16. Farington, 18 December 1793.
17. PRO, Board of Stamps, IR 31/1-8. I have noticed at random payments made to John and Lewis Pingo: £158 at 11 January 1800; £172 at 11 January 1802; and £193 at 9 February 1803. An annual account perhaps. In July 1811 Pingo was summoned to York by the Excise Office to verify a stamp impression in a forgery case, presumably from his own engraving (PRO, Board of Trade, BT 6/123, document 46); and the striking of 'ten Brass Export Stamps' for the Commissioners of Excise in 1798 is noted in PRO, MINT 1/15, p.109.
18. PRO, MINT 4/23, copy or draft letter of 20 July 1801 from J.Morrison to the master, Lord Arden.
19. PRO, MINT 1/16, pp.129-31, dated 25 October 1806.
20. PRO, BT 6/119, 'Sir Joseph Banks's Observations on the Application of the Mint Officers for an Increase of Salary' (undated).
21. *The Banks Letters*, edited by W.R.Dawson (London, 1958), p.672. Banks to Pingo, dated 4 March 1784. Brown, no.258.
22. Farington, 31 December 1796.
23. Farington, 6 January 1797.
24. A monograph on Marchant's life and work, with emphasis on gems, is being prepared by Miss Gertrud Seidmann. It is odd that Sir John Craig, *The Mint* (Cambridge, 1953), p.233, makes Marchant a Frenchman, while Archibald Billing, *The Science of Gems* (London, 1875), p.203, tells us that he was a German. The rest of us, including Miss Seidmann, have no doubt that he was English.
25. This title, of which several variants occur, was used in Marchant's warrant of appointment (PRO, MINT 1/15, pp.15, 16).
26. PRO, MINT 4/21. Marchant's letter to Sir George Yonge, 11 March 1797; J.Morrison to Yonge, 14 March 1797; and Marchant's confirmation to Yonge, 21 March 1797.
27. Farington, 23 March 1797. Ozias Humphry, R.A., 1742-1810, was an old friend of Marchant's, and enjoyed a long, sometimes strained, artist-patron relationship with Yonge. Lords Spencer and Carlisle were patrons of Marchant. Lord Spencer's joke about the Tower relates no doubt to his work at the Admiralty on which so much depended at that time.
28. DNB gives Marchant's dates as 1739-1816. I owe to Miss Seidmann the point about changing taste.
29. PRO, MINT 4/22, Yonge to Morrison, 26 January 1798.
30. PRO, MINT 4/22, Morrison to Yonge, 29 January 1798.
31. Farington, 20 December 1797, 'Rose wishes to attach Marchant to Major that he may succeed him'; and 26 January 1798, 'Rose has informed Marchant that Pitt has agreed to his succeeding Major in Stamp Office - place Rose says shall be £200 a year'.
32. PRO, IR 31/1, minutes dated 20, 23, 27 January 1800, for Marchant's appointment and sureties at the Stamp Office.
33. Marchant's accommodation at the Mint has already been mentioned, but he did not live there. The engravers' houses were part of their emolument to occupy or let at will, except that the chief engraver's responsi-

- bilities required his residence. Marchant never intended to reside (PRO, MINT 4/22, Morrison to Yonge, 19 January 1798), and in 1811 'had never resided nor was ever likely to reside' (PRO, BT 6/123, Sir J. Banks to Earl Bathurst, January 1811).
34. Charles Greville, 1749-1809, art patron.
 35. Farington has perhaps a score of entries from 15 July 1798 to 25 December 1799 on the Academy response to this invitation, and on the highly individual reactions of certain members.
 36. PRO, BT 6/118, Marchant to secretary of Coin Committee, 5 July 1798. The Mint must have acquiesced in his conduct, if grudgingly; and in March the master had desired that 'every Officer concerned in the Engraving Department should exert themselves, each of them, separately, to produce as able specimens both for drawing and execution as they possibly can' (PRO, MINT 4/22, Yonge to Morrison, 17 March 1798).
 37. PRO, MINT 1/15, p.109. The permission to use the die press is dated 7 October 1798, but this or Farington's date must be wrong.
 38. PRO, MINT 1/15, pp.223-24, 229-30. The order on the Mint came from the Treasury, but the source of Marchant's nomination is not stated. Pingo's inglorious part in the affair is related here. Having been recruited to engrave a second pair of dies from Marchant's designs, he apparently put the allegorical figures in the wrong order, and was taken off the job. There must have been some very severe recriminations for this episode to have been given permanent place in the record.
 39. R.L.Kenyon, *The Gold Coins of England* (London, 1884), p.197.
 40. PRO, MINT 4/23, James W.Morrison to John Smyth, the master, 14 October 1803. 'Although I can't say that I myself perceive much progress in the Medal he tells me there is, and that he means to set about the Reverse immediately'.
 41. Farington, 16 July 1803, and 11 April 1806, on his illness.
 42. Compare some remarks on the royal effigies of this period by J.G. Pollard, 'Matthew Boulton and Conrad Heinrich Küchler', NC (1970), pp.259-318, p.314. Marchant, I assume, is the ancestor of Thomas Wyon and Pistrucci.
 43. Brown, nos.132, 266, 291, on which more hereafter.
 44. Farington, 8 July 1794.
 45. Farington, 4 April 1795.
 46. Farington, 6 January and 18 March 1797. For this medal see C.R.Weld, *History of the Royal Society*, 2 vols (London, 1848), I, 219, where it is illustrated and Smirke's participation noted. Brown (no.413) includes a later version of the medal with the Rumford portrait, but does not mention this original medal engraved by Milton and first struck in 1802.
 47. Brown, no.627.
 48. Brown, no.862.
 49. Brown, nos.266, 291. Burch also signs the cast medal of William Hunter, Brown, no.188.
 50. On Burch's sad and impoverished situation see for example Farington, 30 December 1795: 'Burch called on me. He said that in the last four years he has only had one commission, and that but to the amount of

20 guineas. That he had removed to a small house in Paynes Place, Kentish Town, no.1, and with all economy could scarcely support his expences...'. He hoped for £100 from the Academy funds to help him publish a set of impressions from his works. The Academy felt some compassion for him, and had already appointed him their librarian in 1794, which brought in £50 a year.

51. Farington, 18 July 1795.
52. Brown, nos.361, 382. These appear to be his only medals. Two others were wrongly ascribed to him by H.A.Gruuber, 'English Personal Medals from 1760', NC (1890). One is the Captain Cook medal of 1772 (Brown, no.165) which is signed B.F. But as Brown says at the end of his note this should be read as Boulton Fecit (or Boulton & Fothergill), i.e. the manufacturer. And see Forrer, VI, 458, on John Westwood, senior, who may well have been the engraver on the evidence of an obverse cliché with his signature in the Bousfield collection. The cliché was part of lot 214 in the Bousfield sale referred to in note (15).
The other is the Combermere medal of 1821 (Brown, no.1157), or rather its reverse, which has the signature B.F. But since the obverse is signed FAULKNER F. it seems perverse to question the simple equation of B.F. with Benjamin Faulkner!
53. Written 'Barnes' in this edition, but our knowledge of the period requires Barnett.
54. Farington, 20 June and 4 July 1795. Samuel Lysons, 1763-1819, antiquary.
55. *John Flaxman, R.A.*, edited by D.Bindman (Royal Academy Exhibition Catalogue, 1979), p.137.
56. Hutchison, Royal Academy. On the 1818 medal, p.92; and on the prize medals, p.52. And see Brown, nos.132, 133, and his note.

THE DORRIEN & MAGENS SHILLING OF 1798

G.P.Dyer and P.P.Gaspar

Our interest in the Dorrien & Magens shilling of 1798 was aroused only in part by the traditional questions of how many were made, how many were destroyed, and how many might have survived. A greater stimulus was provided by our work on the striking of proof and pattern pieces in the eighteenth century, where we have been able to demonstrate that proofs and patterns were struck in a different way and on a different type of press from currency pieces, enabling us to formulate objective criteria by which proofs can be safely distinguished from their currency counterparts.¹ In reporting these results, we suggested that the Dorrien & Magens shilling might be one area where the application of our criteria could be helpful, for we felt that we ought now to be able to distinguish pieces specially struck as souvenirs from legitimate (or possibly illegitimate) strays from the production run brought to a premature halt on 9 May 1798. The fourteen specimens so far examined have not disappointed us in this respect but it is in fact the historical background to the issue in which we have become increasingly interested.

Silver Coinage in the Eighteenth Century

The most remarkable feature of the silver coinage in the eighteenth century is its absence, minting slowing from a trickle in the first half of the century to a virtual standstill in the second. There was no shortage of silver bullion in the country but so long as the price of silver stayed above the coinage price of 62d. per ounce there was no incentive for it to be brought voluntarily to the Mint for coinage; and even if it were, there would be an inevitable temptation for new full-weight coins either to be hoarded or to be melted down for their bullion value. Some silver had nevertheless come to the Mint but the greater part of it was from fortuitous hauls of foreign booty, such as Vigo in 1702 and Lima in 1745.

By the beginning of George III's reign silver coin was therefore scarce and worn. Crowns and halfcrowns, whose bulk made them particularly convenient for export or for melting down or for hoarding, had more or less disappeared and the silver circulation consisted chiefly of shillings and sixpences worn so flat as to be little better than blank discs. A small issue of silver in 1762 and 1763, mainly in threepences, hardly alleviated the shortage and there were no further issues until the shillings and sixpences of 1787. These, however, as the contemporary records make clear, were intended by the Bank of England not for general issue but merely to oblige those of its customers who wished to have new silver coin at Christmas.² Eleven years later two-fifths were still in the Bank's vaults and the sparing use made of them is reflected in the unworn appearance of so many of the surviving pieces. In effect, the Bank had given up sending ingots to the Mint for coinage at a loss and when it wanted silver coin it acted like other

bankers and bought it where it could, usually paying a premium of one half per cent to one per cent.

By 1797 the situation had deteriorated to such an extent that the government indulged in the expedient of issuing countermarked Spanish dollars, to be replaced later in the year by small seven-shilling pieces in gold. This at least showed a recognition of the seriousness of the situation and Pitt himself acknowledged in public the need for a new silver coinage.³ But the question was: at what standard? It was a question which inevitably led beyond a simple departure from the long established standard of sixty-two shillings to the pound troy and necessarily encompassed a deeper consideration of the proper role of gold and silver. From February 1798 the fundamental review of the coinage dictated by questions of this sort was taken on board by a reconstituted Privy Council Committee on Coin, actively led by Lord Liverpool. With commendable speed, the Committee began at once to give thought to such basic problems as the formal introduction of a gold standard, the relegation of silver to a token coinage, the best alloys for coinage purposes, the suitability of designs, and not least the reorganisation of the Royal Mint.

The Importation of Bullion in 1798

It was against this background that a fall in the price of silver, imputed by the Bank of England to the favourable balance of trade which had brought in a great influx of gold and silver since February 1797,⁴ took it temporarily below the coinage price of 62d. per ounce (Table 1). This had happened before in the 1790s but on this occasion a group of London bankers

TABLE I

Price of bar silver in d. per ounce⁵

3 May 1796	65
2 May 1797	66
1 August 1797.....	61.5
2 January 1798.....	60
2 February 1798.....	60
2 March 1798	60
3 April 1798	61.5
1 May 1798	61.5

decided to exercise their legal right to bring silver bullion to the Mint for coining, acting according to the most vociferous of their number, Magens Dorrien Magens, 'from motives of convenience (the gain at first not being thought of)'.⁶ On 30 March 1798 the Mint was notified of the intention to deposit silver for coining,⁷ and the first delivery of bullion was made on 4 April.⁸ In all some 9,895 lbs., equivalent to £30,000, was delivered by ten importers for conversion into shillings and sixpences and, if Magens is to be believed, more silver was on the way and it was expected that the final total might well reach 100,000 lbs. (Table 2).⁹

Preparations for the coinage proceeded normally. On 14 April a start was made on melting the silver ingots and on 26 April the first issue of silver bars was made to the moneyers. Rolling commenced, dies were sunk, and work was far enough advanced by the beginning of May for there to be talk of a first delivery of coins to the bankers about 16 May.¹⁰

TABLE 2

Silver bullion imported for coinage in 1798¹¹

Name of supplier	Weight of standard silver			
	lbs.	ozs.	dwt.	gr.
Magens Dorrien Magens	296	5	9	13
Hoare & Magens	874	10	2	5
Willis & Co	823	7	2	21
Barclay & Co	1,805	11	0	8
Binns & Wood	434	10	5	17
Barnett & Co	1,737	3	15	20
Robarts & Co	2,173	4	6	6
Devaynes & Co	370	2	11	22
Prescott & Co	674	0	15	18
Hankey & Co	704	11	12	13
Total	9,895	7	2	23

Notes to Table 2¹²

- (i) *Magens Dorrien Magens* of 22 Finch Lane. The name sounds like that of a firm and indeed the late Eric Kelly assumed that it was and transcribed it as Magens, Dorrien & Magens.¹³ But Magens Dorrien Magens is in fact an individual and although he was at the time a partner in the banking house of Dorrien, Magens, Mello, Martin & Harrison there is some suggestion in the Mint records that he may have acted in this matter on his own account.
- (ii) *Hoare & Magens*. There is no firm of this name in the London directories of the period. A possible explanation is that Magens and a member of the Hoare family acted jointly as private individuals and it may be significant that the Mint records do not give an address against their joint names.
- (iii) *Willis, Wood, Percival & Co* of 76 Lombard Street. This is a banking house which dates back to the seventeenth century and which survived until 1878, when it had to stop payment.
- (iv) *Barclay, Tritton & Bevan* of 56 Lombard Street. This house operated under the sign of the Black Spread Eagle, which is still the symbol of Barclays Bank.
- (v) *Binns & Wood* of 57 Threadneedle Street. Binns & Wood, refiners, are the only firm in the list who are not described in the directories as bankers.
- (vi) *Barnett, Hoare, Hill & Barnett* of 62 Lombard Street. Probably one of the oldest banking businesses in London, it was eventually taken over by Lloyds.
- (vii) *Robarts, Curtis, Were, Hornyold & Co* of 15 Lombard Street. A banking house opened in 1792.
- (viii) *Devaynes, Dawes, Noble & Co* of 39 Pall Mall. A banking house established in 1756 and which stopped payment in 1810.
- (ix) *Prescott, Grote & Hollingsworth* of 62 Threadneedle Street. A banking house established in 1766.
- (x) *Hankey & Co* of 7 Fenchurch Street. One of the oldest banking houses in the City of London, it merged into the Consolidated Bank in 1865.

Reaction of the Committee on Coin

This unexpected activity at the Mint did not go unnoticed by the Privy Council Committee on Coin and it is quite wrong to suppose that the Committee was not aware of what was happening until the coins had actually been struck. On the contrary, the same day as the first ingots reached the Mint, 4 April, the governor of the Bank had informed Lord Liverpool.¹⁴ Towards the end of April members of the Committee apparently visited the Mint and would presumably have seen for themselves something of the preparations for the coinage.¹⁵ On 2 May the Committee formally requested an account of the silver bullion imported in the previous six weeks,¹⁶ while on 4 May Lord Liverpool, Sir Joseph Banks and other members of the Committee paid what seems to have been a second visit to the Mint.¹⁷ Shortly afterwards, on 8 May, William Pitt announced in the House of Commons that there was to be a stop on the coinage of silver and that he would be introducing a bill to that effect the following day.¹⁸ It seems that the first the Mint heard of the stop was on 9 May when the moneyers and the engravers attended the Committee for consultations on another matter.¹⁹ The next day, 10 May, when the bill was being read a second time,²⁰ a message was sent by the moneyers to the mint office that the coinage was to be stopped and no more silver bullion to be received.²¹ It was understood that a formal order would follow and James Morrison, the deputy master, reported to the master on 12 May that though the order had not yet been received the message had of course been obeyed.

No written order appears to have been sent to the Mint and no explanation is given in the Committee's proceedings, where the stop is passed over in silence.²² The silver coinage had deteriorated to such an extent that an issue of new coins might have seemed entirely to be welcomed, and Magens, for instance, spoke of a moderate supply flowing gradually into public circulation, without the quantity being large enough materially to affect the community but by slow degrees and almost imperceptibly.²³ To the Committee, however, it might have seemed somewhat premature, engaged as it was on a far reaching examination of the principles of coinage and already convinced that a change would have to be made in the weight standard of the silver coinage. Indeed, Lord Liverpool's draft of the Committee's report, prepared before the end of 1798, suggests that the stop was called in order to afford time for fuller discussion and as much is indicated in the Act itself.²⁴ But Liverpool evidently also saw a risk that the new silver coins would be exchanged for gold coins and the gold coins then melted down and the bullion exported. In consequence an insufficient supply of gold would then be brought to the Mint for coining and the gold coinage would become as inadequate as the silver coinage had been. A sudden rise in the price of silver might then cause a reversal to the original situation and Liverpool thought that Britain would be particularly liable to these fluctuations because the Mint levied no charge for coinage. According to Magens, there was also some feeling that private individuals ought not to be allowed to make a profit from importing silver bullion for coinage.²⁵

Reaction of the Bankers

There is little evidence that the stop caused any serious controversy. *The Times* on 10 May suggested to Pitt that previous notice might have been helpful and that although there might have been an advantage to the importers so there was also to the public in view of the great need for silver coins. The same day in the House of Commons Alderman Curtis, perhaps a partner in one of the banking houses involved, succeeded in delaying the committal of the bill for a couple of days after speaking of the hardship

to those who had exercised their legal right to import bullion for coinage.²⁶ But on the whole it seems to have passed quietly enough and the Act received the royal assent towards the end of June.

Within a few days of the royal assent seven of the ten importers signed a petition to the Treasury on 25 June 1798.²⁷ The Act stated that the importers were to receive payment for their silver at the coinage price of 62d. per ounce, that is, the full value of the coin into which the bullion would have been converted. They had consequently made application for payment but the Mint had declined to pay without an order from the Treasury. The petitioners therefore requested the Treasury to issue such an order so that payment could be made.

The petition was not referred by the Treasury to the Mint until 19 July.²⁸ Meanwhile, on 6 July, the Mint ledgers record the receipt from Barclays, Robarts, Hankey, and Magens Dorrien Magens of a further 4,500 lbs. of silver, raising the total deposited from over 5,000 lbs. to 9,900 lbs.²⁹ Throughout the subsequent settling of accounts this bullion is treated as if it had been deposited before 9 May and indeed the entries are merely part of an administrative tidying up process. The silver had in fact been deposited with the master's assay master before 9 May but at the time of the stop it had not been assayed and formally reported to the principal officers.³⁰ Now that payment was to be made to the importers the standard value of this silver had to be determined and it was accordingly assayed and taken into the custody of the Mint office.

An account of what was due to the bankers was supplied to the Treasury on 20 July and the necessary warrant was at last ordered shortly afterwards. This was hardly soon enough for the bankers, whose loss of interest, according to the deputy master, had made them 'somewhat clamorous' for a settlement.³¹ Payment, not in silver but in Exchequer bills, was finally made on 24 August. As for the silver itself, it was not until June 1799 that the Mint received instructions to deliver it to the Bank of England.³² This was done the following month, some of the silver still being in the form in which it had been presented for coinage and the rest having been remelted into ingots. The expenses of the moneymen and of the melter were not settled until 26 December 1799.

Magens Dorrien Magens

Magens signed the petition to the Treasury on 25 June 1798 and of the aggrieved parties he seems to have created the most fuss, with the result that his name is now associated with the coinage. This is not perhaps inappropriate since he was the first to deliver silver bullion to the Mint and his silver was in the first pot to be melted, but it does seem a little unfair that his name should have been incorrectly used by numismatists. For one thing we believe that Magens may have acted as an individual, and for another that his firm seems never to have been known simply as Dorrien & Magens. It first appears in the directories in 1771 as Dorrien, Rucker & Carleton³³ and in 1798 is shown as Dorrien, Magens, Mello, Martin & Harrison.³⁴ In the years that follow the names continued to change until 1842, when the firm amalgamated with Curries & Co of Cornhill.³⁵ In 1864 Curries merged with Glyn, Mills & Co, now part of Williams & Glyn.

As for Magens Dorrien Magens himself, enough is known about him that a biography might eventually be possible. Of German ancestry, he was born on 31 December 1761³⁶ and in 1788 he married the Hon. Henrietta Cecilia Rice of the family of Lord Dynevor.³⁷ About 1790/91 he seems to have been living in Burford in Gloucestershire³⁸ and in 1796, presumably through his connection

with Lord Dynevor, he briefly represented Carmarthen in Parliament.³⁹ His name by now appears as a partner in the London banking firm and in 1798 and 1799 he is found listed at 10 Cavendish Square in *Boyle's Fashionable Court and Country Guide, and Town Visiting Directory containing an alphabetical arrangement of the Names and Places of Abode (in Town and Country) of all the Ladies and Gentlemen of Fashion.* His country residence is given at this time as Woodcot, Nettlebed, Oxfordshire.

In August 1798 he wrote a pamphlet entitled *Thoughts upon A New Coinage of Silver*, published anonymously as 'A Banker', which stressed the need for a fresh silver coinage but which argued strongly against any debasement. The reviewer in the *Gentleman's Magazine*⁴⁰ described the author as 'disinterested' but Magens was hardly that and Magens it was who was certainly the author. There is a reference to Carmarthen⁴¹ but above all the specific example which he quotes to illustrate the cost of having bullion coined at the Mint refers to the precise quantity of bullion which Magens himself presented for coining on 13 April 1798.⁴² In 1804 Magens published a second pamphlet, this time in his own name (Plate 1).⁴³ The *Gentleman's Magazine* reviewer was in no doubt that Magens was also the author of the earlier pamphlet: 'his style is nearly similar in both these works; frequently incorrect and somewhat confused; and his reasoning often much better conceived than expressed.'⁴⁴ Lord Liverpool was equally unimpressed, finding in what Magens had written confirmation of an idea which he had long entertained, that 'tho' there are many who pretend to a knowledge in the Principles of Coinage there are fewer, who thoroughly understand this Science, than any other whatsoever.'⁴⁵

Some of Magens's subsequent history can be followed through the *Gentleman's Magazine*,⁴⁶ though that magazine does not tell us if Magens was related to the dissolute young actor of that name who died in 1799 and whose features, unfortunately for an aspiring actor, were said to be incapable of expression. An infant daughter died at Cavendish Square on 21 May 1802; between 1804 and 1812 he was again in Parliament, this time representing Ludgershall; and in August 1807 he called the attention of the House to the state of the West India trade, which provided examples for his 1804 pamphlet.⁴⁷ In 1818, when his second daughter, Maria, was married, his address is given as Hammerwood Lodge, Sussex. The widowed Maria married again in 1824, while in March 1828 another daughter, Ann Frances, married the son of the late chief justice of Madras. The following year Magens's wife died but he survived until 30 May 1849, long enough, perhaps, to have read Edward Hawkins's attribution of the 1798 shillings to Messrs. Dorrien and Magens.⁴⁸ His death is mentioned in *The Times*, where his address is given as Hammerwood, East Grinstead, but there is no obituary notice.⁴⁹

How many shillings were struck?

On this point the Mint records are not conclusive. They do, however, indicate in broad terms what had happened by 9 May:⁵⁰

- (i) some 3,250 lbs. of silver ingots had been melted and converted into bars;
- (ii) 1,080 lbs. of these bars had been issued to the moneymen, including 380 lbs. on 9 May;
- (iii) 394 lbs., described as scissel, were returned by the moneymen on 15 May, and using the traditional formula of five-twelfths scissel to seven-twelfths blanks this would suggest that some 950 lbs. had been rolled and blanked;

(iv) 550 lbs. of blanks, equivalent to about 34,000 pieces, had been cut if the scissel/blank ratio is applied.

Whether or not all these blanks were coined, a figure possibly as high as 34,000 seems surprising and it requires that at least part of the 380 lbs. of silver bars issued to the moneymen on 9 May, the day they heard of the stop, was put into work at once. On the other hand it is clear that a first delivery of coin to the importers was intended about 16 May and, if the pattern of deliveries in 1787 is anything to go by, it would have been substantial. Thus with 16 May only four or five working days away it may not be unreasonable to suppose that striking of the coins was well advanced.

A high figure might nevertheless still seem a little puzzling in the light of the 3 lbs. mentioned by Dr Kent in a paper read to this Society some years ago.⁵¹ Dr Kent has kindly shown us his source, a manuscript notebook kept by Anthony Pollett, a Mint officer of the mid-eighteenth century.⁵² It contains details of Mint output and these have been brought down to 1803 by another hand, possibly that of the provost of the moneymen, H.W. Atkinson, whose bookplate it bears. Against 1798 there is an entry of 3 lbs. 9 ozs. 17 dwt. for silver coinage and since there was no Maundy money in that year Dr Kent assumed the figure to relate to the Dorrien & Magens shilling and to give a total of approximately 236 pieces. The Pollett manuscript generally shows few disagreements with the official Mint records but this figure for 1798 is frankly unsatisfactory and does not appear in any of the official accounts of coins produced annually. Only once in the Mint records have we come across an entry of 3 lbs. 9 ozs. 17 dwt. and it is then explained in the following terms: 'Returned into the Office a Remain of Maundy Silver put into work' (Plate 2).⁵³ The entry gives no indication that it relates to coin produced and the likely explanation is that the person who continued Pollett's table misunderstood the records and believed the figure related to the production of Maundy money in 1798.

We therefore prefer a higher figure, though there is some evidence that it may not have been perhaps quite as high as 550 lbs. On 31 May 1798 there remained in the moneymen's hands 682 lbs. 2 ozs. 3 dwt. of silver and it was not until the summer of 1799, a year after the stop, that this silver was returned by the moneymen to the mint office.⁵⁴ An account in MINT 9/212 shows that it was returned as a small weight of inferior silver and as 677 lbs. 6 ozs. 16 dwt. 21 gr. in standard bars and coin. Another, and fuller, description of what was returned refers to 'Money, Blanks, Scissel, Fillets, etc.'⁵⁵ This still does not indicate how many coins were made but the presence of fillets and blanks makes 550 lbs. look somewhat high.

How many shillings now exist?

What it does tell us clearly, however, is that the Dorrien & Magens shillings remained in the moneymen's hands for about a year, ample time for pieces to go astray. The curious entry in MINT 9/212 of inferior silver, equivalent to 4 lbs. 7ozs. 6 dwt. 3 gr. of standard silver, is perhaps suggestive of a discrepancy and might be an indication that some 285 pieces had gone missing and needed to be replaced.

Obviously nothing like this number now survives. They are rare coins and of sufficient interest for their owners to be a very select body, as shown by a notice of the Dorrien and Magens Association in Spink's *Numismatic Circular* for February 1957. The notice was placed by Thomas Lismore and lists four pieces. In January 1959, again in the *Numismatic Circular*, Lismore was able to record ten pieces. There is a general feeling that there could be rather more than this and we have ourselves seen the following fourteen pieces since April 1980.

1. *Royal Mint.* This specimen was presented to the Royal Mint in 1818 by the wife of Sir Joseph Banks.⁵⁶ Sir Joseph was a member of the Privy Council Committee on Coin and the shilling had been in the collection formed by his sister, Sarah Sophia Banks. Through an error on the part of the Mint, it was not listed by Lismore.

2. *British Museum.* Unfortunately the provenance of this coin has not yet been established, but it is clear from Hawkins that it had reached the Museum by 1841.⁵⁷

3. *Ashmolean Museum.* The Ashmolean specimen was presented by Miss E.C.Hatchett Jackson in December 1925 as part of a miscellaneous collection of coins and medals bequeathed to her mother by Miss Jackson's great-grandfather, the well-known chemist Charles Hatchett.⁵⁸ In the spring of 1798 Hatchett had been asked by the Committee on Coin to inspect the metallurgical operations of the Tower Mint⁵⁹ and later that year, in August, he had been commissioned with Henry Cavendish to investigate the comparative rate of wear of gold alloyed with different metals.⁶⁰ In the course of one of his early inspections of the Mint Hatchett was present on a day when silver was being melted for the Dorrien & Magens shillings.⁶¹ He would therefore have been interested in the shillings and a letter of his to the deputy master, James Morrison, on 30 December 1798 is couched in such friendly terms that it is not impossible to believe that he would have been favoured with a coin.⁶² Others close to, and indeed inside, the Mint may have been similarly favoured and it is interesting to find a specimen in the collection of Stanesby Alchorne, the king's assay master, who retired in 1798.⁶³

4/5. *Fitzwilliam Museum.* The Fitzwilliam Museum has two specimens. One comes from the J.S.Henderson bequest of 1933 while the other is unfortunately without provenance. This latter coin is a very badly worn piece, one of only two we have seen which have suffered wear and tear.

6/7. *Birmingham City Museum and Art Gallery.* These two specimens were presented in 1900, having been found below the foundation stone of Christ Church, Birmingham.⁶⁴ Other coins under the stone included two guinea-pieces of 1797, two half-guineas and two seven-shilling pieces of 1804, two six-pences of 1787 and two Maundy sets. What is intriguing is that the stone was laid on 22 July 1805, by which time it seems astonishing that not just one but two Dorrien & Magens shillings could be made available for such a purpose. Mr Gunstone is inclined to see the explanation in the intended presence of the king at the ceremony. This might certainly have justified an approach to the Royal Mint and while there is no trace of such an application in the incomplete Mint records of the period the absence of Soho copper is suggestive. This would mean that as late as 1805 the Mint had retained a quantity of the shillings, which it treated so casually that two could be supplied when the common shillings of 1787 would have done equally as well.⁶⁵

8. *Yale University.* This specimen, listed by Lismore, was presented by William H.Owen in 1945.

9-14. *Privately owned.* The six pieces in private ownership which have been examined include the Larsen and Pegg specimens mentioned by Lismore.

All the coins listed by Lismore may not yet have been located and we should be surprised if the usual estimate of about a dozen pieces might not be at least doubled.

Examination of the surviving coins

As for the coins themselves, their similarity to the shillings of 1787 is

obvious, but there are a number of minor and probably significant differences (Plate 3).

Taking the obverse first, the most noticeable difference concerns the top middle leaf of the wreath, which on the 1787 coins does not extend beyond the top of the head but which on the 1798 coins extends into the field. There are modifications in the arrangement of the hair, particularly in the way the curls cut across the bottom right leaf, and there is a distinctive 'S' shaped curl immediately in front of the ear. The hair, too, stands higher off the forehead. The punctuation is different, the Dorrien & Magens shilling having just a single stop, which comes after GRATIA. Less obviously, there is doubling of the chin, the lips, the tip of the nose, and the tie ends of the wreath, and it is also worth noting the lack of definition of certain features of the king's bust.

The reverses are more closely similar. The vertical and horizontal parts of the central cross, however, are much straighter on the 1798 coins, all the lines being of full length so that they are less like the rays of a star, and there is an ugly flaw in the top part of the cross. The outlines of some of the shields are doubled and it is amusing to find lions in the English quarter with three front legs and the horse in the Hanoverian quarter with three rear legs. The letters are larger than those on the 1787 coins and the T of ET.H is slightly doubled at the top. There is, too, a consistent weakness in the tops of the crowns, a feature which the 1798 coins share to some extent with the shillings of 1787.

The surviving die records indicate that the tools made for the Dorrien & Magens shilling were as in Table 3.⁶⁶ The number of dies is not really surprising. We have already argued that thousands of coins may have been produced and, besides, our examination of the coins has so far enabled us to identify with reasonable certainty three obverse and two reverse dies.

TABLE 3

Tools made for the Dorrien & Magens Shillings

	OBVERSE	REVERSE
Matrices	2	0
Punches	3	4
Dies	11	14

As regards the matrices and punches, however, the number certainly looks excessive. There appear to have been perfectly good punches in stock from the coinage of 1787 and the amount of work involved in making so many matrices and punches seems unusual for the engravers, whom we believe to have been practical people who would wish to avoid unnecessary work. Yet the loss of definition on both obverse and reverse of the 1798 coins tends to support a lengthy process of several removes. Possibly the requirement in 1798 was for fully lettered punches, enabling dies to be sunk which required very little work for completion, and it may be that the extra work involved in producing fully lettered master tools from the incomplete punches of 1787 could be set against savings in time when the dies were made.

Clearly, some hand work was required of the engravers in 1798 in producing the new matrices and punches and it seems possible that there is a connection between the need to carve up the existing 1787 tools and the presence on the coins of fine concentric turning marks. These lines are in relief on the coins and as they appear in the same place on coins from different dies they must have been picked up from the punch. But on the

punch they would appear in relief and it seems much more likely that they are present on the matrix, where they could have been cut by a lathe. Whatever the explanation for them, they are not peculiar to the Dorrien & Magens shilling and can be seen on the obverse, and sometimes on the reverse, of contemporary guineas and half-guineas.

Currency or Proof?

We come at last to what was originally our major interest in these coins. Are the surviving coins trial pieces struck before normal production started? Are they strays from the production run which was brought to a sudden halt on 9 May 1798? Or are they special pieces struck as souvenirs after the event?

Application of our criteria for the separation of eighteenth-century proof pieces from their currency counterparts has given an unequivocal answer.⁶⁷ All the coins so far examined have proved to be normal currency pieces:

- (i) the lettering always has the fishtailed bases associated with currency pieces;
- (ii) there is no evidence that the coins received more than one blow from the dies;
- (iii) the grained edge always shows the overlaps at 180° which are normal for a currency piece, whereas grained-edge proofs are not only very rare in the eighteenth century but where they do exist they show evidence of the use of a different process which leaves a single overlap;
- (iv) there is evidence that at least one of the dies had clashed, a defect wholly incompatible with the way in which proofs were struck at that time but perfectly consistent with currency pieces struck on the run;
- (v) unlike the 1787 proofs, the coins follow the legal requirement in weight and fineness, being made of 925 silver and approximating closely to the standard weight of 6.02 grammes.⁶⁸

These are simple objective tests which do not rely on a subjective assessment of the quality of striking and they tell us emphatically that the coins are genuine strays from the production run. To this may be added the helpful information that all the dies were destroyed on 11 July 1798,⁶⁹ so that the possibility of restriking at a later date can be discounted.

Conclusion

This paper has been entirely about shillings. Yet there is no doubt that the bankers also expected an issue of sixpences and we wonder if work on the sixpences was not almost as far advanced as it was for the shilling.⁷⁰

The die records, indeed, suggest that this might well have been the case. They indicate the production of the following tools: punches, two obverses and two reverses; dies, ten obverses and ten reverses.⁷¹

This is very similar to the shilling. What is more there is an obverse matrix in the Royal Mint collection which on stylistic grounds can be associated with 1798 because of the 'S' shaped curl in front of the ear (Plate 4).⁷² It also has the circular turning marks which are on the 1798 shilling, so that it certainly looks to be a 1798 tool. Much more convincing, however, is a reverse punch (Plate 4).⁷³ This is even dated 1798 and the fact that it has been hardened suggests that dies have been sunk from it and therefore tends to confirm the evidence of the die records. So may we not conclude by asking if there is not somewhere perhaps a Dorrien & Magens sixpence?

NOTES

We acknowledge with gratitude the assistance of the British Museum, the Ashmolean Museum, the Fitzwilliam Museum, the Guildhall Library, and the Department of Local History of the Birmingham City Museums and Art Gallery. We are also grateful to A.H.Baldwin and Sons, and Spink and Son, Ltd., for their kindness in making pieces available for examination, to Professor M.McBride for the weight and specific gravity of the Yale specimen, to Mr Harrington E.Manville, and to Mr Antony Gunstone for reminding us of the two Birmingham specimens. In particular, however, we must acknowledge our debt to Mr Raymond Lax, who not only allowed us to borrow his Dorrien and Magens shilling but also permitted the circulation of the coin at the Society's meeting on 23 June 1981 when this paper was read. A grant from the United States National Endowment for the Humanities has assisted the study of the die collection of the Royal Mint and these studies are continuing. The illustrations for this paper have been prepared by the senior photographer at the Royal Mint, Mr M.T.C.Williams.

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32. PRO, MINT 1/15, pp.156-59, 182-84, 188, 211, 212; 4/23, letter of 15 October 1799 from James Morrison to Lord Hawkesbury.
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52. BL, Royal, King's 68, p.25.
53. PRO, MINT 9/77, p.15.
54. PRO, MINT 9/77, pp.14, 15; 9/212.
55. PRO, MINT 1/15, p.183; 4/23, letter of 15 October 1799 from James Morrison to Lord Hawkesbury.
56. Catalogue of the Coins and Medals Presented by Sir Jos. and Lady Banks, manuscript in the Royal Mint Library, No.847 of the coins presented by Lady Banks on 29 October 1818.
57. Above, footnote 48.
58. Entry of 8 December 1925 in accessions register, 1920-60.
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61. PRO, BT 6/118, pp.122-41 (pp.124-25). 'On Tuesday May the 1st, I saw 417 Pounds weight of Standard Silver melted in this Furnace. - some of the Ingots (weighing from 50 to 60 Pounds) were put in at Six in the Morning, and the last were added at about Eleven. - the whole was ready for casting by Twelve or a little after - '. The Mint records show that this quantity of silver was melted on 2 May, which was in fact a Tuesday.
62. PRO, MINT 9/6.
63. Catalogue of a valuable selection of English Coins from the cabinet of the late Stanesby Alchorne, Esq. of the Mint in the Tower of London, Sotheby, 11 May 1848, Lot 244 'Shilling, 1798, very rare, and well preserved'.
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65. Sir John Craig, *The Mint* (Cambridge, 1953), p.262.
66. PRO, MINT 14/12.
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68. Weights of individual pieces in grammes: British Museum, 6.04; Royal Mint, 6.02; Ashmolean Museum, 6.01; Fitzwilliam Museum, 6.01 and 5.91; Yale, 6.02; in private hands, 6.02, 6.02, 6.04, 5.97 and 6.02.
69. Above, footnote 66.
70. Above, footnote 10.
71. Above, footnote 66.
72. W.J.Hocking, Catalogue of the Coins, Tokens, Medals, Dies and Seals in the Museum of the Royal Mint (London, 1906 and 1910), II (1910), 30, No.473. Micro hardness measurements indicate that the tool was hardened, with readings from the face of the tool of VPN 622 ± 30 and 830 ± 40 with a 200g load.
73. Hocking, No.476. This tool was also hardened with a reading of VPN 1040 ± 50 with a 100g load for the face of the tool.

PLATE 1

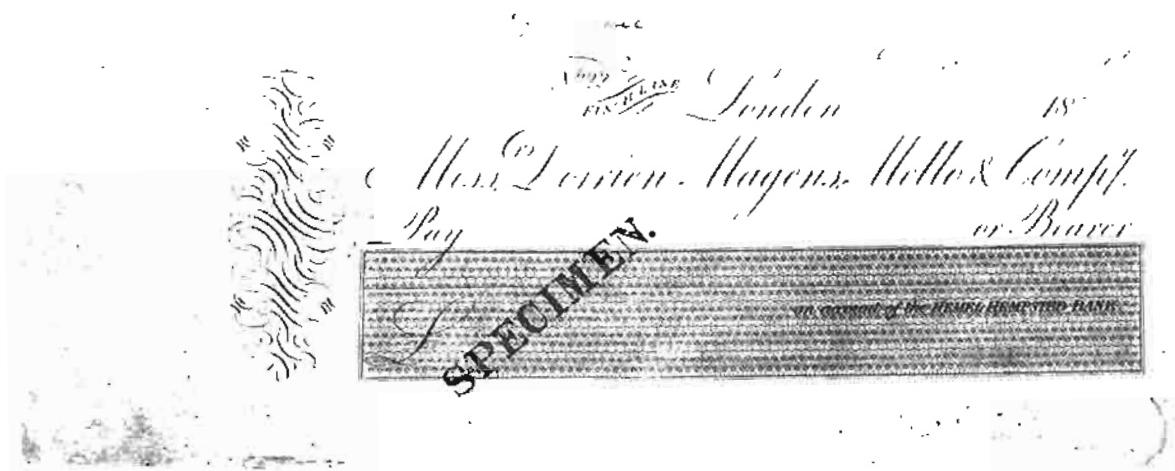
AN
INQUIRY
INTO THE
Real Difference between *actual Money*,
CONSISTING OF
GOLD and SILVER,
AND
PAPER MONEY of various Descriptions.
ALSO,
AN EXAMINATION
INTO
The CONSTITUTIONS OF BANKS ;
AND
The Impossibility of their combining the Two
Characters of BANK and EXCHEQUER.

BY
MAGENS DORRIEN MAGENS, ESQ.

LONDON:
PRINTED FOR J. ASPERNE,
AT THE BIBLE, CROWN, AND CONSTITUTION,
CORNHILL,
By T. Major, Stationer-Lent, London & Baker.
1804.

Title page of pamphlet published by
Magens Dorrien Magens in 1804

PLATE 2



Specimen cheque of Messrs Dorrien, Magens,
Mello & Company, 1841 ($\times \frac{2}{3}$)

(1) Mr. Honeyers for Silver. £. Cents. 6^x

1/98	1/98
Apr 26. To Bars.	300 - - - - -
May 2. 6. 20.	400 - - - - -
9. 10. 20.	380 - - - - -
	<u>1080 - - - - -</u>
	397. 9. 17. 0
Balanc. 31 May.	<u>682. 2. 3. 0</u>
	July 10. By Supply
	<u>682. 2. 3. 0</u>
	1799

Entry in PRO. Mint 9/77 relating to Maundy silver

PLATE 3



1



2

1. Obverse of 1787 shilling
2. Obverse of Dorrien and Magens shilling



3



4

3. Reverse of 1787 shilling
4. Reverse of Dorrien and Magens shilling
(all $\times 2\frac{1}{2}$)

PLATE 4

Obverse matrix for sixpence, probably 1798 ($\times 2\frac{1}{2}$)Reverse punch for sixpence, 1798 ($\times 2\frac{1}{2}$)

THE PURPOSE AND USE OF PUBLIC-HOUSE CHECKS

R.H.Thompson and A.J.Wager

The pieces with which this paper deals are metal tokens issued in the nineteenth and early twentieth century by alehouses, beerhouses, hotels, inns, taverns, and other retailers of beer, wine and spirits. They bear denominations of 1d., 1½d., 2d., 2½d., 3d., (e.g. Pl.9) or less frequently ½d., 4d., 5d., 6d., or more. The main series emerged shortly before the middle of the nineteenth century: created since 1830 according to Grant Francis;¹ struck since 1840 according to Neumann;² first made in quantity by Hiron, who flourished from 1846/7;³ dated pieces go back to 1848.⁴

Although, following French,⁵ the pieces have often been called 'tavern tokens', the normal contemporary term was 'check', as Mr Hawkins demonstrated in a contribution to the colloquium, an extract from which he has kindly permitted us to publish as Appendix 1. To this we may add an 1873/4 advertisement for Helmore of Exeter, 'manufacturer of yellow metal checks, coins, stamps etc. for schools, clubs, billiards and skittle alleys', and an 1889/90 advertisement for E.Seage & Son of Exeter, 'Manufacturers of Yellow Metal Cheques, for Club Houses, Skittle Alleys, &c.';⁶ and the consistent use of *check* or *cheque* in the numismatic and legal literature quoted in Section II below, with the ironic exception of French, who introduces the term 'scrip'. The contemporary significance of the word, referring to a metal disc, was twofold: either 'a means to ensure accuracy, correctness, security from fraud, etc.: as...A token, usually a memorandum of receipt, a ticket, or piece of metal duly stamped or numbered, used for the purpose of identification, or as evidence of ownership or title';⁷ or 'a counter used in games at cards', which the *OED* Supplement takes back to 1845.⁸ This latter sense, however, is marked *U.S.*, and American sources do not restrict it to card games.⁹ Evidence in this paper indicates the same for Britain.

Section I below extracts evidence on the purpose of pub checks from a publication by Neumann, and Sections II-V examine well-attested uses of the checks in games and gaming, for admission to music-halls etc., by friendly societies, and as truck. Other suggested uses, and the basic purpose, are discussed in the Conclusion.

I. ANALYSIS OF NEUMANN

The first list of pub checks was published in Prague by Josef Neumann (1815-78).¹⁰ He was a lawyer, eventually justice at Prague (*Landesgerichtsrat*), with the post (amongst others) of examining magistrate in the criminal court. He played so active a part in the foundation in 1849 of the first Bohemian numismatic society (*Verein für Numismatik zu Prag*) that he became its first secretary. For twenty years he organised its activities and its

property, as well as the necessary membership returns to the police; he has been called its *spiritus rector*. It was Neumann's influence which led the distinguished numismatist Eduard Fiala first to take up the study of coins.

From 1852 the society was sponsoring a catalogue of Bohemian private coinage and medals initiated by Jindřich (=Heinrich) Otokar Miltner.¹¹ After Miltner's removal to Cracow in 1858 Neumann continued the work, on which he was engaged until 1870. By this time he was weary of numismatic labours, for in addition to a book on the Joachimsthal mintmasters (1866), Neumann was also compiling, and publishing at his own expense, the work by which he is best known, the *Beschreibung der bekanntesten Kupfermünzen* (1858-72). This catalogue sets out to describe, in volumes I-III, the copper coinages of all nations, and in volumes IV-VI the tokens and jettons (with a supplement). Although it is not a scientific catalogue like his work with Miltner, it remains a very complete and unrivalled corpus of material. A testimony to its continued value is the 1966 reprint, with the addition of a seventh, index, volume by Lore Börner.

Volume IV, covering the tokens, jettons and counters of the British Isles, was published in 1865. The pub checks it includes consequently represent the first two decades of the main series, when their original purpose is likely to have been most apparent.¹² The basis of the list must have been in large part the specimens collected in London by Dr W. Freudenthal, and now in the British Museum.¹³ Many of these are in *fleur de coin* condition, and so likely to have been obtained direct from the Birmingham or London manufacturers. This may have resulted in under-representation of production from such places as Exeter and Dublin, but it can hardly have introduced a collector's bias towards particular themes. Indeed, there is every indication of an ambition to be totally comprehensive in copper coins and coin-like objects, both in Freudenthal's 19,000-strong collection,¹⁴ and in Neumann's 40,000-entry catalogue.

Of the 1,632 pieces enumerated by Neumann from hotels, inns, gambling clubs, places of entertainment etc., a number not only identify a public house and perhaps its proprietor and the maker of the check, as well as giving the denomination, and perhaps advertising ales, wines and spirits, and tobacco (which may be considered basic to a public house), but also, despite the limited space available, mention various other facilities. Those that do so are in a minority; but in our present state of knowledge it is possible to suppose that they are exceptional only in referring to such facilities, and actually represent the original purpose and use of the checks as a series. Even if they are unrepresentative, they still constitute a significant body of evidence for some of the uses of pub checks.

To be rigorous with the material in Neumann it is necessary to omit those seventeen pieces referring to games, sixty-seven to other forms of entertainment, and sixteen others, for which there is no positive evidence of issue by a public house. This leaves approximately 1,532 pub checks ('approximately' because Neumann has duplicated half-a-dozen entries under different headings, and also interpolated in the numbering half-a-dozen additions). Of these, 285 (nineteen per cent) refer to the other facilities detailed below. Figure 1 presents their distribution graphically, and they are listed in Appendix 2.

(a) Games

No less than 203, or seventy-one per cent of these 285 checks, relate to games of various sorts, either by name, mutely by representing a player, or by use of one of the dies of bagatelle-table makers which Mr Hawkins has

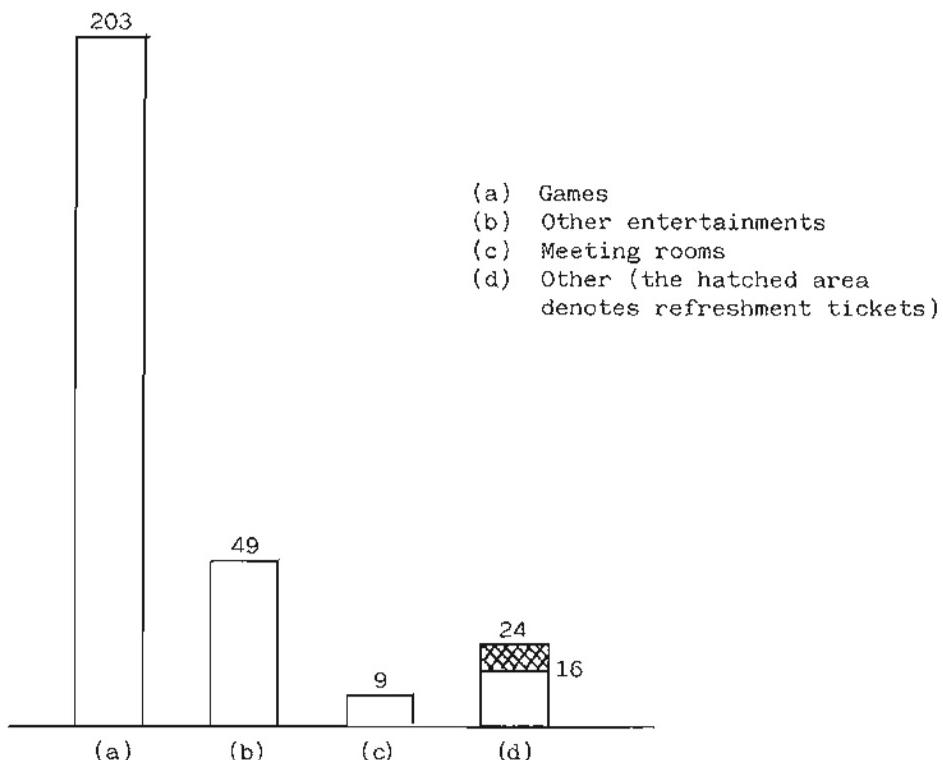


Figure 1. Pub checks listed by Neumann, 1865

studied.¹⁵ Such a die will doubtless have related to a table already supplied; it would certainly not have been sensible for a publican to advertise a facility which his house did not provide, and indeed the game is sometimes mentioned on the other face.¹⁶ The eighty-three checks using these table makers' dies are listed according to the Hawkins figure to which the descriptions correspond.

The remaining games checks are listed in order of frequency of the games; no attempt has been made to ascertain whether any of the different names relate to the same game. Bagatelle, including 'Billiard bagatelle,'¹⁷ has 23 in addition to the 83 of table makers; bowling, including American bowling, 49; skittles, 16; billiards, 4; 'Knock-'em-Down', 3; quoits, 2; lobbing, 1; racquets, 1; 'Recreative', 1; and combinations of games, 20. This function will be considered further in Section II.

(b) Other Entertainments

This heading comprises forty-nine checks, or seventeen per cent of the 285, which refer to the following forms of entertainment: concerts, 27; gardens (pleasure, tea, etc.), 11; music saloon, 5; harmonic hall, 2; music hall, 2; gallery, 1 (but if this were a shooting gallery it should be classed with games); and museum, 1. Four checks which it seems most appropriate to classify under games also mention such entertainments.¹⁸ Music halls etc. will be considered further in Section III.

(c) Meeting Rooms

Nine checks, or three per cent, indicate that a particular public house was used as the meeting place for a friendly society or club: a £50 investment society, a £50 investment and loan society, a £25 money society, a building society, a birth night society, a burial society, or a Loyal Wilson Lodge; there is also a cricket club. Two checks for a quoit club and a bagatelle club have been classed with games, and another item under that heading is combined with a 'Society Hall'. Friendly societies will be considered further in Section IV.

(d) Other Facilities

Finally, twenty-four of the 285 checks, or eight per cent, refer to various other facilities. Pertaining to an inn- or hotel-keeping function are 'Well-aired beds' etc., 'B B' which is presumably to be understood as 'Bed & Breakfast', and 'Stables' etc. Two mention an ordinary, which was a public meal regularly provided at a fixed price, and one a tariff omnibus. Those mentioning an auctioneer, or a wholesale coal dealer, may relate in function to Section V. Also placed under this heading are eight 'refreshment tickets', which could be relevant to any of the facilities above. Five checks classified under games also mention some of the facilities mentioned here, or a 'Posting House', or 'Private Sitting Rooms'.

II. GAMES AND GAMING

The most striking result of analysing Neumann is the preponderant context of games for the early pub checks. Some of them actually make their purpose plain with the legend BAGATELLE CHECK¹⁹ (e.g. Pl.nos.3,4), BOWLING CHECK,²⁰ KNOCK-'EM-DOWN CHECK,²¹ or SKITTLE CHECK.²² How they were used is less clear, although certain legends may be indicative. For bagatelle there is AVAILABLE ONLY IN THE BAGATELLE ROOM,²³ ONLY AVAILABLE UP TO 11-50 P.M. & IN THE BAGATELLE ROOM,²⁴ and TO BE SPENT IN THE BAGATELLE ROOM ONLY;²⁵ for bowling, WILL BE RECEIVED SUBJECT TO THE RULES OF THE BOWLING ALLEY;²⁶ and for 'knock-'em-down', WILL BE RECEIVED SUBJECT TO THE RULES OF KNOCK-'EM-DOWN.²⁷ See Pl.no.6 for a possible representation of this game; and for billiards or bagatelle, Pl.no.5.

Games also featured among the explanations of the earliest numismatic commentators. In 1867 G.Grant Francis referred to 'another trade convenience' which had been created by the issue of

little Copper, Brass, and Gilt Tokens, or Medallots termed 'cheques'; they are of the halfpenny and farthing size (chiefly the latter) and represent their nominal value, 1½d., 2d., and 3d., and are used nearly always at small taverns, where games are played, to enable, as I am informed, the customer to call in at any subsequent time and have his refreshment to the value indicated.²⁸

Six years later H.S.Gill described a check of the Windmill Inn, Holloway Street, Exeter, as 'a specimen of the ordinary check frequently used in billiard-rooms, bowling-greens, skittle-alleys, &c., entitling the bearer to have the value of threepence, or other sums impressed on token [sic], in ale, cider, or spirits'.²⁹ Again, in one of the rare annotations in his vast catalogue, Batty recorded (with disappointing brevity) that eight halfpenny-sized pieces 'were used in the Public Houses at Whitby as Checks for Games at Dominoes, Cards, &c.'.³⁰ In 1917 E.J.French cited one Robert Archer for the use to which the Dublin pub checks had been put in the period 1850-65:

The game (billiards or bagatelle) was played for drink, never for money, and the loser paid for the 'round'. After two or three games, one, or perhaps two, of the players would not care to have another drink, but it was understood by the players that the landlord should get paid 8d. for the use of the table for each game played. The landlord accordingly got the 8d. from the loser and gave two creamy pints to the two thirsty ones and two 'scrips' to the men who said they had had enough.

Subsequently each of these latter could produce his 'scrip' and exchange it for a drink to the value of 2d., 2½d., or 3d.³¹ Finally, Will Morgan of Neath has provided an enthusiastic account of the use of 4d. brass checks in South Wales public houses with skittle alleys in the years 1918–25: they were given as prizes after each game, and could be exchanged only in the particular public house for beer (at 4d. a pint), or cigarettes.³²

All these accounts are apparently independent of each other, relating as they do to four or five different areas, and are the fullest explanations yet available of the employment of checks in connexion with games. Nevertheless, except for the last which is recorded late, none demonstrates for certain a first-hand acquaintance with the full use of checks, and they do need to be treated with some reserve.

Following a decision of the court of Queen's Bench in April 1869, checks were involved in several prosecutions of licensees for gaming, which (if knowingly permitted) was an offence against the tenor of their licence under the Alehouse Act of 1828. The court had decided, in the case of *Danford v. Taylor*, that it was equally gaming whether four men played for money or for money's worth; and Lord Chief Justice Cockburn added, 'they agreed by playing these games to determine who as losers should pay for those who won. This is simply gaming'.³³ Later in the same year, at the Birmingham petty sessions, James Wort, licensed victualler of the Old Guy, Digbeth, was summoned for having, on 16 October, knowingly suffered gaming upon his premises by permitting persons to play skittles for money, checks, and ale. Police Constable Harrison testified that on the evening in question he, with other officers, went to the defendant's skittle-alley and saw six men, four of whom commenced to play, and that after the game was over the two players who had lost paid the defendant's servant some money and checks for refreshments, which were thereupon distributed to the players.

Mr Michael Maher, on behalf of the defendant, contended that no gaming had been proved to have taken place. The defendant was entitled to have his skittle alley, and was at liberty, if he chose, to charge the players for the use of it; and by a custom which prevailed almost everywhere throughout the country, whether at billiards or at any other game, the parties who lose paid for the use of the board or ground, and the mere fact of checks being given out in exchange for the money so paid, even though the checks entitled the holder to refreshment, could not constitute gaming. In concert halls it was the custom to charge for admission to the performance, and a check was given, entitling the visitor to refreshment. The Bench agreed with this view of the case, and dismissed the summons.³⁴

Other legal opinions did not concur. Checks may have been involved when Jonathan Holt of Dukinfield, Cheshire, was convicted at Hyde of allowing gaming, for a trade newspaper commented after his licence had been suspended, 'playing for checks is playing for money or money's worth, and that, in the eye of the law, is gambling'.³⁵ Again, a subscriber to *The Justice of the Peace* asked whether, in the editors' opinion, an offence had been committed in the situation where:

A is an innkeeper, and has upon his premises a covered skittle alley where persons play skittles for checks, which represent a certain payment in beer, upon tender of which to the landlord or his agent beer is given to the holder or winner, who goes into the house to drink same; B, a police constable, ...in reply to a question from A's son learns how many checks have been won and lost.

The answer given was, 'if the playing for checks, which represent money and for which beer is given, is proved, the innkeeper will be liable...'.³⁶ Lastly, in 1873 William Patrick, licensee of the Duke of York, Brick Kiln Street, Wolverhampton, was convicted of permitting gaming after four persons had been found playing bagatelle for checks, four per game, for which a player defeated previously had paid 6d. Patrick pleaded that 'the generality of the Licensed Victuallers throughout Wolverhampton and the district continued the same practices'.³⁷

Thus there is no doubt that checks were used in what, from 1869, was legally considered gaming.³⁸ It does not necessarily follow that this was their purpose.

III. PUB CHECKS AS ADMISSION/REFRESHMENT TICKETS

Sometimes the pub checks themselves clearly specify the use to which they were put. This is the case with those used by the concert halls which adjoined many public houses and which would usually charge an entrance fee, in return for which the customer would be given a check or 'ticket' which could be exchanged for drink or tobacco. One example of such a 'refreshment check' is that of the Spread Eagle Concert Hall in Birmingham. The reverse legend reads TO BE SPENT THE SAME NIGHT AS RECEIVED. The advertisement proclaiming the opening of the 'New and Splendid Concert Hall' at the Spread Eagle confirms this particular usage: 'Admission by ticket only, obtainable at Entrance. The amount returned in Refreshments'.³⁹

Concert halls varied in size: usually beginning as small rooms attached to a public house, they often grew into sizeable theatres. It seems that most of those attached to public houses were laid out with rows of tables at which the patrons sat and drank, listening to the entertainment being performed from a stage at the front. This was so at Holder's Concert Hall, Birmingham, originally the Rodney Inn, but extended and enlarged at various times in the nineteenth century, until in 1886 it was renamed the Gaiety Theatre of Varieties.⁴⁰ The proprietor, Henry Holder, issued many different varieties of refreshment check. A typical example reads 3D / TO BE SPENT THE SAME EVENING AS RECEIVED SUBJECT TO THE RULES OF THE CONCERT HALL.

Refreshment checks were also used in connection with a variety of other entertainments and recreation which public houses offered. (E.g. Pl.no.2) Their association with games and gaming has been considered above. The Vine Inn, Cremorne Gardens, Aston, had several checks which variously said: BOWLING GREEN 3D TO BE RETURNED IN REFRESHMENTS; DANCING ON THE GREEN EVERY EVENING ADMISSION 3D TO BE RETURNED IN REFRESHMENTS; THIS CHECK TO BE RETURNED IN REFRESHMENTS.

The use of pub checks in this way is supported by a growing amount of documentary evidence. One very early reference to their use appears in a description of the Eagle Tavern, City Road, London, in Chambers's Edinburgh Journal for June 1839. Here, the visitor paid one shilling admission fee and received in return a 'check or ticket' which entitled him 'at any

period of the evening's entertainments, to call for whatever refreshment he pleases to the value of one sixpence'. The admission fee for the boxes ('the usual resort of the female visitants to these entertainments') was also a shilling 'but no refreshment is here included'.⁴¹

Later, in 1854, evidence given to the Select Committee on Public Houses revealed that refreshment checks were still in use at the Eagle Tavern: 'you have to pay sixpence for a refreshment ticket; a refreshment ticket gives the privilege of taking a lady in; they wait round the door to be taken in by gentlemen'.⁴² Later in the same report it is implied that the Eagle may have used the checks to evade Sunday Licensing regulations: 'at the Eagle Tavern a Sunday Refreshment-ticket entitles you to admission and sixpenny-worth of refreshment; if you go upon other days of the week you pay for the amusements and the refreshments also'.⁴³

In 1862 James Day extended his Birmingham public house (originally known as the White Swan) by opening a concert hall next door, which was known as 'Day's Crystal Palace Concert Hall'. Checks were issued bearing the reverse legend 3D TO BE SPENT IN THE CONCERT HALL ONLY, THE SAME EVENING AS RECEIVED. (Pl.no.1) In 1866 the manager of the concert hall, Daniel Saunders, interviewed by the Select Committee on Theatrical Licenses and Regulations, gave details of how this check was used:

What is the average admission fee at your hall? - I do not think it would amount to more than 6d.

Will you be good enough to inform the Committee the exact prices?

- Admission, 1s. front stalls; 6d. side stalls; 6d. for the floor, with 3d. returned in refreshments; 7d. or 8d. would be the average.

Threepence is returned in refreshments on the floor?

- Yes, 3d. is returned by check.⁴⁴

When the Birmingham publican James Wort, of the Old Guy, Digbeth, was accused of gaming, it was successfully argued in his defence that the checks were being used in the same way as checks at concert halls.⁴⁵ This is supported by John MacMillan, a token collector and small-time dealer who lived in Edgbaston, Birmingham, at the turn of the century and whose manuscript list of the items in his collection is housed in Birmingham Reference Library. MacMillan wrote that this collection contained 'several hundred of these checks and many of the places represented are now happily closed forever. At not a few of these houses, cards, dominoes and other games were permitted and when the play was over and the drink consumed had been paid for, checks were given to those who had not had returns in the way of drinks'.⁴⁶ In the context of concert halls and other public-house entertainment, therefore, checks seem to have been used by the licensee in order to ensure that a minimum amount of money was spent in refreshments as payment for the use of his facilities.

IV. PUB CHECKS AND FRIENDLY SOCIETIES

The same basic function of checks is reflected in their well-documented use by publicans in connection with the hire of rooms for the meetings of friendly societies and other organisations. The nineteenth-century friendly society was usually a society of working men concerned in particular with the provision of benefits in sickness and old age by means of regular contributions to a fund.⁴⁷ It also offered social activities, and frequently chose to meet in the convivial atmosphere of the local inn. The registrar of friendly societies claimed in 1859 that 'in most populous villages every public house

has one or more clubs'.⁵⁰ In 1876 the registrar listed 178 public houses in Birmingham which were the registered offices of friendly societies.⁵¹ Of these, at least 107 are known to have issued checks.⁵²

In some cases the checks make specific reference to the friendly societies which occupied their premises, and which were often named after the public house where they met (see Pl.no.7). Typical examples have the legends THE SPREAD EAGLE SICK AND DIVIDEND SOCIETY ACOCKS GREEN and THE HEATH ST TAVERN SICK AND DIVIDEND SOCIETY WINSON GREEN. It seems to have been common practice for a publican to demand that a certain amount of liquor be consumed by the members of the society who used his premises, rather than charge a fixed rent. One way of operating this system was for each member of the society to buy metal checks which might then be redeemed for refreshment during the evening. The system was greatly criticised since it encouraged members to waste money on drink, and was the subject of discussion in the annual reports of the registrar of friendly societies. His report of August 1860 includes a letter from someone who claimed he was refused admission to a friendly society because he was unwilling to purchase a 'liquor ticket'.⁵³

The 1871 Report of the Royal Commission on Friendly Societies shows that the commissioners were aware of this problem and keen to investigate it. John Noden, secretary of the Salford Funeral Friendly Society, reported that it was their practice to meet in a public house and that the publican was the treasurer of the society. He did not charge rent; instead, a proportion (1s. in the £) of the funeral benefits given to members in the event of a bereavement was paid by 'liquor-cheque'. In addition, at every meeting the committee members were each given 6d. in the form of 'four cheques of 1½d. a cheque' in consideration of their attendance.⁵⁴

Similarly, the secretary of the New United Friendly Burial Society, Manchester, reported that the landlord of the public house at which they met was the treasurer of the society, and that part of the benefit paid to members was by way of a 'liquor-note'. Each officer of the society received 'four cheques of 2d. each' for attending the general meetings, which took place four times a year.⁵⁵ At the Fidelity Sick and Burial Society which met at the Nelson Tavern, Ashton under Lyne, 'each head of a family must take a 3d. cheque at each quarterly meeting. The publican cashes them, but the member may consume what he orders at home'.⁵⁶

When the Hulme Good Intent Burial Society met at the George and Dragon, Moss Lane, Manchester, every member attending received 'sixpenny worth of cheques' in order to compensate the landlord for the use of the room. It was stressed by the secretary that not all these checks were spent on drink: 'they give them liquor, cigars, vinegar or anything else. Many take it in vinegar; they do not take it in intoxicating liquors'.⁵⁷ Again, the publican and the treasurer of the society were the same person.

Many members objected very strongly to the use of funds in this way, and in doing so Joseph Harrison, a member of the Foresters Lodge which met at the Red Cow Inn, Horse Fair, Birmingham, gave evidence to the commission and described in some detail how checks were used:

There is an item in the balance-sheet of £18.17s.6d. paid for 'remuneration to host'? - Yes.

What does that mean? - That money is spent in drink in lieu of rent.

Have you a cheque which you can hand in to show how it is done? - Yes (handing in the same).

This is a token with a name upon it and the 'Red Cow', and the figure 2½? - Yes.

Will you explain the meaning of this token? - That is to pay 2½d. Each member as he enters the room has one of those cheques presented to him, and after a certain time, if there are not sufficient members coming in to exhaust the amount which must be spent in liquor on that particular night, the cheques go round again.

Are the members in attendance entitled to the whole of the tokens? - Yes, each member is entitled to one at least.

But if there is a deficiency in numbers, are the members who do attend entitled to the full value of the tokens presented? - I have never seen a meeting in my experience, where there were many members there, that all of them did not get one each, but very frequently they nearly go round twice, except on quarterly or general meetings.

What is the highest number of tokens which you have ever known one member get? - Two would be the highest, speaking from memory. It does not happen often that they get two each, but generally one and a portion of another, by paying something in money to get one.⁵⁶

A specimen of the check mentioned is illustrated on the plate, no.8.

V. PUB CHECKS AND THE TRUCK SYSTEM

Despite legislation such as the 1831 Truck Act, the truck system, 'the name given to a set of closely related arrangements whereby some form of consumption is tied to the employment contract',⁵⁷ continued to operate throughout much of the nineteenth century. The precise nature of the system varied in different industries and in different parts of the country. The commissioners of 1871 distinguished two types of truck: that involving 'outright compulsion' to purchase goods from the company shop; and 'conditional compulsion', which involved drawing wages in advance on condition of their being spent on company goods. The former was most common in the handloom-weaving, nail-making, and other Midland hardware trades; the latter was practised mainly in ironworks and collieries.⁵⁸

Not only were wages frequently paid in public houses, but large employers frequently owned public houses. When the truck commissioners investigated the Blaenavon Coal and Iron Works, Monmouthshire, they discovered that at the back of the company shop was a beershop or 'drinking bar' commonly known as the *Drum and Monkey*. Edwin Jones, a blast furnaceman at Blaenavon, reported that if the workmen wished to draw wages in advance of payday, they could do so in the form of notes exchangeable at the company shop. 'Beer notes' were also available, which were negotiable at the drinking bar. If the whole amount of the note was not spent on drink, then change was given in the shape of 'checks' or 'dibs' for sixpence and threepence, which could be used in the bar on a later occasion but which were 'of no use except there'. The 'dibs' were described as 'small brass medals', with one produced for inspection having the legend 'Blaenavon Shops (limited) near Pontypool, Mon., 6d.'⁵⁹ Examples of these checks (of 5d. and 6d. values) are to be found in the National Museum of Wales (Pl.nos.10,11).

When a brass founder, David Jones, was examined, he described the same system, referring to the pieces he received at the bar as 'checks': 'a piece of brass, something like a farthing'.⁶⁰ A draper who used to work at the company shop, Thomas Parry, stated that the checks were issued as part of a bonus system of payment:

They had them given to them by the gaffers in the works for any little extra work they did. When there was any extra work the gaffers would

give the men some of these checks to go and get some beer... If a man had a check for 6d. he would go to the shop and say, 'I want a pint of beer'. That would be 3d., and he would get a 'dib' for 3d. with which he had to come back again at some other time.⁶¹

This explanation was supported by the manager of the shop and adjoining beerhouse, Morwent Bron Parker:

They [the men] are given checks by the Company, and I give checks for the company's notes. The company sometimes have 10 or 20 or 30 men who are doing heavy jobs of extra work. They may have been working all night charging the fires in the furnaces, or any other operation where there is intense heat, and the gaffer will say, 'Now, my men, you have worked very well. We will make you a present of so many checks, and you can distribute them among yourselves'. They bring the checks to me, and I supply them with the drink.⁶²

How extensive this usage of pub checks was is as yet unclear, though there is some evidence that it was practised elsewhere. The landlord of The Fire Engine in St George, Bristol, reported that his father (who kept the public house before him) remembered brass checks being 'given' to miners who were short of money to enable them to buy drinks, presumably on a credit basis; and that some were given checks for extra duties carried out at the pit opposite the public house.⁶³ After receiving 'an astonishingly large number of replies' to his enquiry about the use of 'inn tokens' in the *Daily Telegraph* of 13 March 1964, H.A. Monckton illustrated a check issued by the Papermakers' Arms in Exeter with the explanation that 'the employer at the local paper mill purchased these tokens from the public house and then issued them to his workpeople as a beer allowance'.⁶⁴

There is clearly scope for further research on this topic, particularly in establishing more precisely the relationship between publicans and the proprietors of local industries.

VI. CONCLUSION

Various other uses of pub checks have been put forward, Mr Gunstone having assembled a total of eight possibilities, which do not include two of those considered above.⁶⁵ Perhaps the best-established uses which have not been discussed are, firstly, credit notes for the consumption of beer on a future occasion, as suggested by Francis, French, MacMillan, and some documents in Section V;⁶⁶ and secondly, gifts to promote custom, for which the evidence, however, is late. It is reported that, prior to the flood disaster of 1952, tradesmen visiting the Lyndale Hotel, Lynmouth, were presented with checks;⁶⁷ and that customers at the Redditch cattle markets were given checks by the auctioneers which were honoured in the local public houses and subsequently redeemed by the firm.⁶⁸ In addition, there has been a convoluted argument seeking to establish pub checks as pre-paid receipts for drink in a form of internal accounting.⁶⁹

If, however, we turn to the uses for which there is strong contemporary testimony, we find a common factor. In the truck system, checks were given either as bonuses, or as change for notes; in each case they could only be used for drink. For friendly societies, the purchase of checks convertible into liquor was compulsory for use of their meeting rooms, and such checks were also part of the benefits paid out in the event of a funeral. For admission to a concert or music hall, a refreshment ticket was required, to be spent the same evening as received. For use of the games facilities in

a public house, it was necessary to buy checks; they might incidentally be used for gaming, but essentially they were a charge for use of the facilities, returnable in drink. A trade paper clearly acknowledged that the purchase of checks was an alternative to a straightforward payment for the amusements, in discussing whether licensed victuallers and beersellers 'must make a specific money charge, or charge by cheque, to be returned in refreshments... The check is, indeed, simply a charge'.⁷⁰

It was not, though, always a simple charge, but rather a compound one. Those who chose not to join the ladies and children in the better areas of a hall or garden had to pay the same price of admission, except that it included a compulsory payment for 'refreshment'. Similarly, the checks of the friendly societies represented not only pre-payment for the accommodation but also a compulsory purchase of liquor, in which there would be further profit for the publican. As the registrar of friendly societies pointed out, 'the landlord receives a far larger sum as profit than the most exorbitant rent would amount to'.⁷¹ Those who wished to meet socially, to watch entertainers, to play games, were obliged also to take the landlord's beer. While a publican, in providing meeting rooms, instruments of amusement, concert and music halls, could hope only for increased custom for his house, by the use of checks he was able to make some charge in the case of games, and a hidden additional charge for use of the other facilities, in the form of profit on his beer. This was the purpose of pub checks.

This practice has obvious similarities with the truck system in that both placed restrictions on expenditure. Pub checks, however, were not normally tied to an employment contract, and we propose to call their use the check system. Such a concept, indeed, finds some documentary support. A Wolverhampton magistrate referred in 1873 to 'the check-scheme';⁷² and assistant commissioner Sir George Young reported in 1874 that the Great Western Annual Benefit Society in Bristol had become a mere 'drinking club'. The members 'pay 2s. a month, and get 3d. back in beer out of that. The beer is distributed on the 'cheque' system; so it is all drunk, and all are enlisted in keeping up the system'.⁷³ Whilst it would be unwise to exaggerate its importance, we would suggest that the check system is a neglected phenomenon deserving greater attention from historians and numismatists.

NOTES

This paper grew out of a colloquium on pub checks which the British Numismatic Society organised in June 1982. Since the papers we delivered usefully supplemented each other, it seemed appropriate to combine them for publication. Sections I, II, and Appendix 2 are largely the responsibility of R.H.T., Sections III, IV and V that of A.J.W., and the conclusion is written jointly; each of us, however, has contributed materially to sections other than his own. We are particularly grateful for the encouragement we received from Mr.J.D.Brand.

- Grant Francis, *Brass, copper and silver tokens current in the Swansea district between 1666 & 1813...* (Swansea, 1867), p.116; reprinted from *The Cambrian*, 15 March 1867; a section of *The smelting of copper in the Swansea district...* (Swansea, 1867).

2. Josef Neumann, *Beschreibung der bekanntesten Kupfermünzen*, IV (Prague, 1865), 333.
3. R.N.P.Hawkins, 'Dictionary of Makers of British Nineteenth-Century Metallic Tickets and Checks', *SCMB* 1960, 180-1; 1966, 197-8.
4. Neumann, 28056. There may be isolated examples with earlier dates.
5. E.J.French, 'Tavern tokens', *Journal of the Royal Society of Antiquaries of Ireland*, 48 (1918), 164-73.
6. Yolanda C.Stanton and Neil B.Todd, *Devon Tavern Tokens*, forthcoming. Ms Stanton generously made this information available in advance of publication.
7. *OED*, *Check*, sb.¹, 14 and 14b, cited from 1812, although the comparable definition in *The Shorter Oxford English dictionary*, third edition (1944), is dated from 1706; compare *Webster's third new international dictionary of the English language*, unabridged edition (London and Springfield, Mass., 1961), ²*check* n., 11a: 'a card or small metal piece showing ownership, indicating payment of a charge or fee, identifying a person, or enabling him to make certain demands or claims'.
8. *OED*, 15; *A supplement to the Oxford English dictionary*, V (Oxford, 1972).
9. Webster, 11c: 'a counter used in various games (as card games) that is often cashed or otherwise turned in on leaving a game'; John S. Salak, *Dictionary of gambling* (London, 1963): *check* is the same as *chip*, 'A token used for betting purposes in place of money'.
10. The following account is drawn from C.Ernst, 'Nekrologe: Joseph [sic] Neumann', *Numismatische Zeitschrift*, 11 (1879), 448-50; Emanuela Nohejlová-Prátová and Eduard Šimek, *Dvě století vědecké numismatiky v Českých zemích (1771-1971)*, (Prague, 1971); and Emanuela Nohejlová-Prátová, 'Zwei Jahrhunderte wissenschaftliche Numismatik in den böhmischen Ländern, 1771-1971', *Sborník Národního muzea v Praze*, A: *Historie*, 26 (1972), 1-87, pls. [1-8]. A portrait of Neumann may be found in *Časopis Národního muzea v Praze*, řada historická, 150 (1981), 61.
11. Dana Svobodová, 'Z dějin české numismatiky: Jindřich Otokar Miltner a začátky organizace numismatické práce', *Numismatický Sborník*, 14 (1976), 133-98.
12. The relevant section is IV (otherwise II.D), 'Zeichen': ix, 'Hotels, Gast- und Spielhäuser, Vergnügungsorte &c.', pp.333-438, nos.26610-28241.
13. Neumann's collection of 30,000 copper coins and medals was at his request incorporated in 1876 in what is now the Kunsthistorisches Museum in Vienna; and Dr Karl Schulz of that institution kindly reports that Neumann had only 162 specimens, less than one in ten of the pieces catalogued. Freudenthal's assistance in describing his collection is acknowledged in the foreword.
14. John Walker, 'The early history of the Department of Coins and Medals', *The British Museum Quarterly*, 18 (1953), 76-80 (p.78).
15. R.N.P.Hawkins, *Four studies of British metallic tickets and commercial checks of the 19th-20th centuries* (London, 1975), pp.35-51.
16. e.g. Neumann, 27173, 27497, 27556.
17. Neumann, 27607.

18. Neumann, 26811 (concert hall), 27403 ('Vauxhall'), [27849] (pleasure gardens), and 28187 (pleasure garden).
19. Neumann, 27160.
20. Neil B.Todd, *Tavern tokens in Wales* (Cardiff; 1980), p.21, no.4, dated 1880.
21. Neumann, 26674.
22. Neumann, 26781, 27418, 27432, 28015. There would be considerably more such checks if one could be sure that (e.g.) BAGATELLE curved above the denomination and CHECK curved below it constituted a single statement.
23. Neumann, 27329.
24. Neumann, 26839; R.N.P.Hawkins, *Guide list of public houses and beer shops and their proprietors featured on metallic checks issued within 1830-1910 in Birmingham and Smethwick* (Birmingham, 1978), p.15, confirms that this was a pub.
25. Neumann, 27146.
26. Neumann, 26893-4.
27. Neumann, 26774; Neumann, 26930, with confirmation from Hawkins, *Guide list* (note 24), p.51; Andrew J.Wager, 'How were nineteenth-century "pub checks" used?', *SCMB* 1981, 317-20 (p.318).
28. Francis, p.116. Attention was drawn to this by R.H.Thompson, 'A contemporary account of tavern tokens', *Irish Numismatics*, 11 (1978), 293.
29. H.S.Gill, 'On Devonshire tokens, Part II', *Report and Transactions of the Devonshire Association...*, 6 (1873), 159-72 (p.168). This reference was kindly pointed out by Ms Yolanda Stanton.
30. D.T.Batty, *Batty's catalogue of the copper coinage of Great Britain, Ireland...&c.*, Part XIII (Manchester, 1877), 310.
31. French, p.165.
32. Todd, pp.235-36.
33. *The Bar Reports*, 9 [= *The Law Times Reports*, new series, 20] (March-Aug.1869), 483-84; *The Justice of the Peace*, 33 (1869), 612-13.
34. 'Is it legal to play for cheques at bagatelle?', *Licensed Victuallers' Guardian*, 17 Sept.1870, p.316, quoting their report of November 1869.
35. 'Annual licensing meeting for the Division of Hyde, Cheshire', *Licensed Victuallers' Guardian*, 3 Sept.1870, p.298. Mr Philip Mernick found this and the previous reference at the Newspaper Library, Colindale, and kindly made them available.
36. 'Alehouses: offence against license: gaming', *The Justice of the Peace*, 35 (1871), 253. Four years earlier a subscriber had described the use of marked 'bits of cards' in a skittle alley as 'tickets or checks' for the winning of ale: 31 (1867), 827.
37. Wager, pp.318-19.
38. In 1849, when a correspondent outlined the case of two teams playing each other at bagatelle for quarts or pints of ale, and asked whether playing for money's worth was not equally gaming, the reply was 'we are not aware of any case which has been decided on this point'. 'Alehouses: gaming: bagatelle', *The Justice of the Peace*, 13 (1849), 543.

39. Undated press cutting in John MacMillan, 'Description of checks issued by Birmingham Concert Halls, Public Gardens, Public Houses, Bowling Greens etc., with newspaper cuttings on drink, taverns and the like, collected by John MacMillan c.1850-1920' (Manuscript in Birmingham Reference Library, ref.302179), p.62.
40. Hawkins, *Guide list*, p.59.
41. Quoted in Raymond Mander and Joe Mitchenson, *British music hall*, revised edition (London, 1974), pp.13-15.
42. Select Committee on Public Houses (Parl. Papers, 1854 (367) XIV), Q.4768.
43. Parl. Papers, 1854 (367) XIV, Q.4800.
44. Select Committee on Theatrical Licenses and Regulations (Parl. Papers, 1866 (373) XVI), QQ.7433-7435.
45. See above at note 34.
46. Newspaper cutting dated 12/5/1912, in MacMillan, p.118. John MacMillan's portrait can be found among those of 'Contemporary Collectors' in W.J.Davis, *The Nineteenth Century Token Coinage* (London and New York, 1904), frontispiece.
47. P.H.J.H.Gosden, *The Friendly Societies in England, 1815-1875* (Manchester, 1961), and *Self-help: Voluntary Associations in Nineteenth Century Britain* (London, 1973).
48. *Fourth Annual Report of the Registrar of Friendly Societies in England* (1859), p.17.
49. *Appendix to Reports of the Chief Registrar of Friendly Societies* (1876), pp.446-59.
50. Based on those checks listed in Hawkins, *Guide list*. Numerous additional specimens have been reported since the publication of the list, so this figure could be much higher.
51. *Report of the Registrar of Friendly Societies in England* (1860), pp.35-36.
52. Royal Commission on Friendly and Benefit Building Societies, Second Report, Part II (Parl. Papers, 1872 (C.514-I) XXVI), QQ.17,769-17,780.
53. Parl. Papers, 1872 (C.514-I) XXVI, QQ.18,031-18,050.
54. Royal Commission on Friendly and Benefit Building Societies, Reports of the Assistant Commissioners: Cheshire...[etc.] (Parl. Papers, 1874 (C.996) XXIII Part 11), p.87.
55. Parl. Papers, 1872 (C.514-I) XXVI, QQ.18,105-18,110.
56. Parl. Papers, 1872 (C.514-I) XXVI, QQ.18,664-18,682.
57. G.W.Hilton, *The Truck System* (Cambridge, 1960), p.1.
58. Hilton, p.10.
59. *Report of the Commissioners appointed to inquire into the Truck System, Vol.II* (Parl. Papers, 1871 (C.327) XXXVI), QQ.21,833-21,859.
60. Parl. Papers, 1871 (C.327) XXXVI, QQ.21,945-21,947.
61. Parl. Papers, 1871 (C.327) XXXVI, QQ.22,198-22,202.
62. Parl. Papers, 1871 (C.327) XXXVI, QQ.28,479-28,481.

63. John Durnell, Bristol, personal communication to A.J.W., 11 July 1982.
64. H.A.Monckton, *A history of English ale and beer* (London etc., 1966), p.227.
65. Antony Gunstone, *Nineteenth-century Lincolnshire beer tickets*, Lincolnshire Museums, Information sheet, numismatic series, no.1 (Lincoln, 1979); see also Wager.
66. Above at notes 28, 31, 46, 59, 61. To the extent that this may be considered a separate usage, however, it was very much a subsidiary one; and it was really no more than an extension outside the premises of the normal use of checks.
67. Monckton, p.227.
68. John Whitmore, Hagley, personal communication to A.J.W., 13 July 1982.
69. Neil B.Todd, 'What is a tavern token?', *British & Irish Tokens Journal*, 1 (1980), 32-39.
70. Above, note 34.
71. *Fourth Annual Report of the Registrar of Friendly Societies*, pp.17-18.
72. Wager, p.319.
73. Royal Commission on *Friendly and Benefit Building Societies*, *Reports of the Assistant Commissioners: Southern and Eastern Counties of England* (Parl. Papers, 1874 (C.997) XXIII Part II), p.63.

APPENDIX 1

Numismatic nomenclature used by Birmingham makers for the discs they produced: a chronological list of quotations from their entries and advertisements in directories, and on dies

by R.N.P.Hawkins

- 1847 Samuel Hiron: 'Check / 2 / pence', and likewise for $2\frac{1}{2}$ d. and 3d., on stock reverse dies for public-house discs
- c.1847 Samuel Hiron: 'coins, tokens, checks, & presses' on his Dudley self-advertising disc
- 1850-1 T.Pope & Co.: 'Check / 3^D' similarly
- 1850-2 Ryland & Johnson: 'Check / 2 $\frac{1}{2}$ D' similarly
- 1853 Edward Avern: 'coins, checks, and embossing presses'
- c.1856 Henry Smith: 'Check / 4^D / fourpence' on a public-house disc
- 1856-8 H.Whitlock: 'Engraver, letter cutter, & check maker' on a public-house disc
- 1857 H.T.Bagshaw: 'maker of brass labels, tokens, checks, &c.'
- 1858/9 James White Senr.: 'Check / 1 $\frac{1}{2}$ D' on a public-house disc
- 1860 Edwin Cottrill: 'medals, coins, checks'
- 1860 Henry Smith (again): 'metallic address cards, tokens, checks'

- 1860 T.Pope & Co. (again): 'coins, medals, school tokens, checks for workmen's time, innkeepers' and publicans' checks'
- 1860 J.W.Lewis: 'medals, tokens, cheques' (but none have been identified)
- 1862 S.A.Daniell: 'metal labels, checks, and medals'
- 1866 J.Gretton: 'labels, checks, tokens, &c.'
- [1866] J.Bird: '1½^D bagatelle check'
- c.1868 John Neal: 'checks, labels, &c.' on a pleasure-gardens disc ('tokens, labels, &c.' in directories)
- 1872 A.H.Alldridge: 'coin & check works'
- c.1880 J.Pittaway: 'check maker' on his sole known disc (for a fish salesman)
- 1887 Walter Middleton: 'metallic checks for publicans, hotels, theatre, and music hall proprietors'
- 1894 William York: 'brass checks for hotel proprietors, clubs, societies, &c.'
- 1900-3 G.A.Willson: 'metallic checks'

The list shows complete uniformity in use of the term *check* by nineteen makers. There were no dissentients: the rest of the makers used no term at all, they simply signed as 'maker' or not even that.

APPENDIX 2

Pub checks listed by Neumann which refer to anything
other than alcoholic beverages and tobacco

References added in brackets to the Neumann number provide evidence that the issuing establishment was a pub, 'Hawkins' being the work cited in note 24, and 'Todd' that in note 20.

(a) Games

Mute representations are placed in square brackets.

Bagatelle: 26811 (Hawkins, p.45), 26839 (Hawkins, p.15), 26840, 26917, 27089, 27146, 27160, 27183, 27295 (Todd, p.55), 27297 (Todd, p.50), 27312 (Club), 27315, 27329, 27607, 27656, 27670, 27861, [27866], 28120, 28163, [28166], 28168, 28192.

Bagatelle-table manufacturers, listed in accordance with Hawkins (see note 15).

- B (Twist, 26 mm): 26768, 26776, 26852, 26865, 26952, 27060, 27072, 27120, 27324, 27357, 27367, 27455, 27614, 27722, 27844, 28038, 28220.
- C (Twist & Morris, 26 mm): 26618, 26640, 26644-5, 26777, 26803, 26979, 27321, 27325, 27409, 27437, 27441, 27458, 27467, 27472, 27481, 27497, 27535, 27645, 27834, 27886, 27961, 27970-1, 27983, 28039; (also 27835, listed under Combinations).
- D (Morris): 26615, 26671, 27173, 27185, 27322, 27537, 27634, 27681, 27705, 27785, 27803 (also Posting House), 27812, 27847, 27855, 27972, 27976, 27982, 28084; (also 28187, listed under Combinations).

E (Twist, 28 mm): 27165, 27171, 27556, 27566, 27715, 27833, 27944, 27951, 27973, 27987.

F (Twist & Morris, 32 mm): 26619, 26799, 27480, 27990 (also Private Sitting Rooms).

G (Beddows): 26842, 27210, 27225, 27500, 27530, 27984.

- (T.Harris, Birmingham): 27317.

- (G.Green, Leeds): 27682.

Bowling: 26621, 26659, 26665, 26677, 26728, 26765, 26770, 26893-4, 26997, 27018, 27244-6, 27266, 27281, 27286, 27288, 27291, 27300, 27302, 27402-4, 27416, 27435-6 (also Society Hall), 27457, 27488, 27534, 27699, 27709, 27711, 27760, 27769, 27829, 27832 (cf. 27835), 28009, 29020-1, 28059, 28061, 28140, 28145, 28149-50 (Todd, p.106), 28161-2, 28164.

Skittles: 26612, 26741, 26763, 26781, 27298-9, 27418, 27431-2, 27698, 27768 (Todd, p.186), [27849], 27872, 27985, 28015, 28186.

Billiards: [26624], 26882, 27602, [27684].

Knock-'em-Down: 26674, 26774, 26930 (Hawkins, p.51).

Quoits: 27311 (Club), 27986.

Lobbing: 27069 (Hawkins, pp.31, 62).

Racquets: [27170].

'Recreative': 27824.

Combinations of games: 26616-7 (Billiards, bagatelle), 26812 or '3 (Quoits, bowling, also Good stabling), 26994 (Quoits, bowling, also Good stabling), 27010 (Bagatelle, skittles, quoits), 27030 (Bowling, lobbing), 27287 (Bagatelle, bowling), 27349 (Quoits, bowling, also Good stabling), 27419 (Skittles, bowling), 27433 (Skittles, shooting), 27496 (Bagatelle, bowling), 27631 (Bagatelle, billiards), 27691 (Bowling, shooting, bagatelle), 27764 (Skittles, bagatelle), 27835 (Bowling, bagatelle), 27842 (Bagatelle, bowling), 28003-4 (Bowling, quoits), 28060 (Quoits, bowling, also Good stabling), 28187 (Bowling, bagatelle, also Pleasure garden).

(b) Other Entertainments

Concerts: 26809-10, 26832, 26889-92, 26896 (Hawkins, p.59), 26904-5, 27088, 27095, 27180, 27187 (also Museum), 27189, 27200-3, 27279, 27362, 27541, 27770, 27776, 27853 (Todd, p.121), 28077, 28179.

Gardens: 26732-4 (Hawkins, pp.48, 62), 26854 (also Camera Obscura), 27151 (Hawkins, p.62), 27396-7, 27447, 27762, 27836, 28177.

Music Saloon: 27700-4.

Harmonic Hall: 27174, 27412.

Music Hall: 27363, 27893.

Gallery: 26620.

Museum: 26627.

(c) Meeting Rooms

£50 investment (& loan) society: 27326, 28031.

£25 money society: 27333.

Building society: 27657.

Birth Night society: 28013, 28111.

Burial society: 27637.

Cricket club: 26648.

Loyal Wilson Lodge: 27504.

(d) Other Facilities

Well-aired beds, also Baths: 26792, 26945, 26965, 27026, 27098, 27979.

B[ed &] B[reakfast]: 26628, 26793.

Stables, Horses for hire, etc.: 27285, 27892, 27975.

Ordinary: 26753, 26769.

Auctioneer: 27047.

Wholesale coal dealer: 26814.

Tariff Omnibus: 27094.

Refreshment tickets: 27036, 27591, 27605, 27613, 27649-51, 27839.

KEY TO PLATE

1. Crystal Palace Concert Hall, 76 Smallbrook Street and 1 Hurst Street, Birmingham: James Day, 1862-76: 3d. British Museum, Department of British and Mediaeval Antiquities, Catalogue of the Montague Guest collection of badges, tokens and passes... (London 1930), 514; Hawkins, *Guide list*, 25.
2. Bee Hive Inn, 44 Bull Street, Birmingham: James Alexander Reynolds, 1854: 3d. Neumann 27036; Hawkins, *Guide list*, 14.
3. General Havelock Inn, 18 Aston Road North, Birmingham: Thomas Godwin, 1866-82: 1½d. bagatelle check; maker, J.Bird, 1861-73. Hawkins, 'Dictionary', SCMB (1971), 289.
4. Swan Inn, Good Knaves' End, Harborne Road, Birmingham: William Chapman, 1857-77: 3d. bagatelle check; maker, T.Pope. Batty (1876) 2300H; Hawkins, *Guide list*, 69.
5. Country House Inn, Exeter: Henry L.Elworthy: 1½d., representing a game of billiards or bagatelle.
6. Britannia Inn, Castle Cary: Jno. Speed Andrews: 1½d., possibly representing 'knock-'em-down'.
7. Cock & Magpies Sick and Dividend Society, Beech Lanes, Harborne, Birmingham: 3d. (obv. only).
8. Red Cow Inn, 23 & 24 Horse Fair, Birmingham: Samuel Jerome, 1866-75: 2½d. Batty 4306C, if 'anchor' is an error for 'archer'; Hawkins, *Guide list*, 57. See Section IV above; the reverse presumably refers to the Foresters Lodge.
9. Red Cow Inn, 23 & 24 Horse Fair, Birmingham: John Lloyd, 1909-: 3d. Hawkins, *Guide list*, 57.
- 10-11. Blaenavon Shops Limited, near Pontypool, Mon.: 5d. and 6d. See Section V above.

Source of specimens: 4, Mr H.Williamson, Birmingham; 10-11, Department of Archaeology & Numismatics, National Museum of Wales, Cardiff; the remainder, A.J.Wager.

Mr J.D.Cumbers kindly photographed nos.1-9, and Ms Y.Stanton nos.10-11.



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10



11



NUMBERED STRIKINGS OF VICTORIAN BRONZE COINS, 1860-68

G.P.Dyer

In 1925 Henry Garside described two pennies of 1867, a halfpenny of 1867 and a halfpenny of 1868, each with a pair of numbers scratched on the obverse.¹ In 1960 C.W.Peck² was able to increase the number of such coins to eighteen pennies, four halfpennies and six farthings, all dated between 1860 and 1868, while in 1970 Dr Stewart³ added another penny, dated 1863, to bring the total to twenty-nine pieces.

The numbers appear on the obverse either side of the royal effigy or in the form of an improper fraction in the field in front of the queen's face. They are roughly scratched into the surface and there can be no doubt that they were added to the coins after striking. In the opinion of Garside, the first number is that of the obverse die in use during the year in which the coins were struck and the second number that of the reverse die, leading him to conclude that the numbered coins were the first impressions from the dies and were the pieces submitted to senior officials at the Mint for approval before coinage with these dies was allowed to proceed. Peck repeated this explanation, even though in the case of two farthings of 1864 with the same pair of numbers it obliged him to suppose that 'the first trial was temporarily mislaid, necessitating a second'.⁴ It was left to Dr Stewart to cast doubt on Garside's theory, pointing out that the scratched numbers fell a long way short of the enormous quantity of dies required during a period of extraordinarily high production of bronze coin.

Seventeen of the twenty-nine pieces are in the British Museum and examination of them reinforces the doubts expressed by Dr Stewart. There is nothing obviously superior about the quality of the striking and, though well preserved, the coins do not have the appearance of specially struck trial pieces. Indeed, of the seventeen coins, at least twelve have been struck from dies that are either cracked or clashed; on some the cracks are extensive, while one of the farthing dies appears to have clashed more than once. Such defects are clearly incompatible with first impressions from new dies and the best that can be said of the coins is that they appear to be ordinary pieces taken at random from a production run.

An alternative explanation is therefore required and Dr Stewart made a decisive step in this direction by demonstrating that the scratched numbers fall into obvious series (Table 1). Quite simply, the greater numbers are continuous throughout regardless of denomination while the lesser numbers are consecutive within separate series for each denomination. There is, it is true, a slight inconsistency at the beginning, when the greater number looks to be repeated, but between 1863 and 1868 the sequence holds up remarkably well.

Dr Stewart could not, however, explain the purpose of the numbers. He recognized that the scratched pieces could not be coins set aside for the Trial of the Pyx at Goldsmiths' Hall since the Trial was restricted to gold

TABLE 1

Numbered Strikings of Victorian Bronze Coins, 1860-68

Date	Penny	Halfpenny	Farthing
1860	40/40	-	-
	63/63	-	-
1861	99/99	-	-
	-	102/102	-
1863	222/126	-	-
	223/127	-	-
	228/132	-	-
1864	-	-	233/8
	-	-	234/9
	-	-	236/11
	237/134	-	-
	239/136	-	-
	240/137	-	-
1865	-	312/118	-
	345/207	-	-
	351/213	-	-
	-	-	374/20
1866	476/299	-	-
	482/305	-	-
	486/309	-	-
	-	-	514/41
1867	542/329	-	-
	543/330	-	-
	550/337	-	-
	569/356	-	-
	582/369	-	-
1868	-	593/174	-
	-	598/178	-

and silver and did not include bronze. Nor did they appear to him to relate to output, some 350 million bronze coins having been struck by 1868; moreover, for 1862, when roughly a third of this total quantity had been produced, no numbered coins at all apparently survived. On balance Dr Stewart felt obliged to conclude, though perhaps without much enthusiasm, that the numbered strikings were to be connected in some way with the usage or output of certain dies or groups of dies.

It seems to me that Dr Stewart was right to consider output, and if two

simple but vital corrections are made the relationship can be shown to be much closer than he thought. The first point concerns the way in which output is to be measured. It is normal these days to think of millions of pieces but with eighteenth- and nineteenth-century copper and bronze it is in fact more sensible to think in terms of tons. Throughout the eighteenth century, for example, this was how output of copper was expressed, the deliveries of new coin from the moneymen into the mint office always being recorded as a weight. In the nineteenth century output was similarly considered in terms of weight and it is no accident that annual production was regularly an exact number of tons. Since the bronze coins were simple fractions of an ounce there was no difficulty in converting the weight of a particular denomination into numbers of pieces or face value.

The other important point about output is that the Royal Mint was not the only mint which produced bronze coin during the early 1860s. The replacement of the old copper coins, begun in 1860, was a very large undertaking and quite beyond the resources of a Royal Mint already heavily occupied with the production of gold and silver coins. A major part of the work, some 1720 tons of pennies, halfpennies and farthings, was therefore put out to tender and a contract for this quantity was awarded to James Watt & Co on 3 September 1860.⁵ It was not in the event a happy choice and Watts were indeed so slow to get under way that a small supplementary contract for up to sixty tons had to be placed on 17 December 1860 with Heatons, an efficient and well-run firm which probably ought to have had the main contract. Heaton's small contract seems not to have been carried out in its entirety since by the spring of 1861 Watts had overcome many of the problems and had got into their stride. Their vast contract for 1720 tons was finally completed, according to Ansell, by the striking of a bronze penny at 9.00 a.m. on Thursday, 11 June 1863.⁶

Thus in the period to which the scratched coins belong, 1860-68, three mints were involved in the production of bronze coin: the Royal Mint, Watts and Heatons. Unfortunately, separate output figures for the three mints are not given in the published accounts and, as so often, the unpublished Mint records are not as helpful as they might be. Sufficient clues exist, however, to provide a perfectly adequate picture (Table 2). Two of the mints,

TABLE 2
Production of Bronze Coin in Tons, 1860-68

Period	Royal Mint	James Watt	Ralph Heaton
November 1860 - March 1861	104	74	32
April 1861 - March 1862	28	730	9
April 1862 - March 1863	33	813	-
April 1863 - December 1863	36	103	-
January - December 1864	42	-	-
January - December 1865	138	-	-
January - December 1866	117	-	-
January - December 1867	79	-	-
January - December 1868	41	-	-
Total	618	1720	41

Watt's and Heaton's, did not strike bronze coins after 1863 and cannot therefore be responsible for the scratched coins after that date. These later coins must be Royal Mint pieces and this has suggested that perhaps all the numbered strikings emanate from the Royal Mint and that in attempting to match the scratched figures to output only the production of the Royal Mint need be considered.

While slight difficulties about the Royal Mint's figures still remain, it can be asserted with some confidence that the breakdown by denomination may be summarized as in Table 3 and this, in turn, suggests a possible

TABLE 3

Royal Mint Output by Denomination, 1860-68

Denomination	Output in Tons
Penny	375
Halfpenny	182
Farthing	61
Total	618

correlation with the series of numbers described by Dr Stewart. He demonstrated that the greater number was continuous throughout regardless of denomination: the highest number so far recorded is 598 on a coin of 1868 and this corresponds well with a total output of 618 tons by the end of 1868. As regards the individual denominations, to which Dr Stewart would attribute the lesser number of each pair, the correlation becomes still more convincing. For pennies the highest number recorded is 369, as against a total production by the end of 1868 of 375 tons; for halfpennies 178 as against a production of 182 tons; and for farthings forty-one as against sixty-one tons.

It is not an entirely perfect match but this would probably be too much to expect. For one thing there remains a slight uncertainty about the precise output of the Royal Mint during this period. For another, there is the smallness of the sample, only twenty-nine pieces instead of the six hundred or more which might perhaps be possible. Then there is the difficulty of knowing whether the whole of the 1868 output should be included or whether the numbering system was brought to an end during the course of that year. There is the difficulty, too, of working from the assumption that the date of a numbered coin is the same as the year in which it was struck. Given all these difficulties, the correlation between the Royal Mint's output in tons and the scratched numbers in fact holds up remarkably well.

But of course the correlation does not of itself provide an explanation of the purpose of the scratched numbers. They can scarcely have been required to measure output and it may well be that the link with output is an accidental consequence of the numbering system. Nevertheless, the possibility of a link suggests that it is worth looking again at the Pyx. It is certainly quite true, as Dr Stewart pointed out, that bronze coins are not submitted to the Trial of the Pyx at Goldsmiths' Hall, but this is a formal Trial, intended as an external and independent check on the Mint. It is therefore additional to all the tests and inspections, to the internal pyxing, carried out within the Mint before coins are issued to the public. These internal tests apply to bronze as well as to gold, silver and cupro-nickel

and I believe that it is these internal pyxing arrangements which offer an explanation of the scratched coins. That is to say, the numbered coins were the sample pieces taken from each delivery of coins from the coining department to the mint office and which prior to assay were given the scratched pair of numbers to identify them with the delivery from which they were taken.

It would be helpful if a detailed record survived of all the deliveries of bronze coin into the mint office between 1860 and 1868. The surviving Mint records, however, are sadly deficient and they do not even appear to contain an indication of the average size of a delivery. Judging from the gold and silver records, deliveries were likely to have been maintained as far as possible at a constant figure and perhaps it may not be unreasonable to suggest that for bronze this figure may have been a ton, made up of forty journeys of fifty-six lbs. each.

The absence of a full record is a handicap but on the other hand there is the evidence of the numbering system itself, with its two figures, one of which normally relates to total output and the other to the output of the individual denominations. Some time ago Mr E.G.V. Newman told me that when he was chemist and assayer of the Mint this was precisely the numbering system which was used for internal pyxing of groups of related coins. It is, indeed, the system still in use at the Royal Mint and Table 4 shows the start of the current sequence for United Kingdom bronze coins, which began on 1 January 1982 and which will continue until 31 December.

TABLE 4

United Kingdom Bronze Pyxes, 4-6 January 1982

Date	2p	1p	$\frac{1}{2}p$
4 January	-	1/1	-
4 January	2/1	-	-
4 January	3/2	-	-
5 January	4/3	-	-
5 January	-	5/2	-
5 January	6/4	-	-
5 January	7/5	-	-
5 January	8/6	-	-
5 January	-	9/3	-
6 January	10/7	-	-

Before the end of January, $\frac{1}{2}p$ production had begun and the sequence at that point is set out in Table 5. The identifying number is not, however, scratched on the sample coins required for assay, the modern generation of Mint officers being content to write it on the envelope which contains the ten pieces taken from each pyx.

If it is accepted that the numbered strikings of Victorian bronze coins are sample pieces taken for internal pyxing purposes, then two or three puzzling features of the surviving coins may be fairly easily explained. To begin with, the first four pieces repeat the higher number and while this would clearly not be quite as informative as the improper fraction which

TABLE 5

United Kingdom Bronze Pyxes, 22-29 January 1982

Date	2p	1p	$\frac{1}{2}$ p
22 January	-	29/7	-
22 January	30/23	-	-
25 January	-	-	31/1
26 January	32/24	-	-
26 January	-	33/8	-
26 January	34/25	-	-
27 January	-	35/9	-
27 January	36/26	-	-
28 January	-	37/10	-
29 January	38/27	-	-

appears on the later pieces it would nevertheless be sufficient to identify the pyx from which the pieces were taken. Nor does the survival of two farthings with the same pair of numbers call any longer for special explanation, since if current practice is anything to go by it would not have been necessary to assay all the sample pieces taken from each pyx. It would also explain the state of the coins themselves, the evidence of cracked and clashed dies being quite consistent with pieces taken at random from a production run. Finally, the absence of numbered pieces after 1868 may be attributed to changes in organisation and personnel following the death of John Graham and Thomas Graham in 1869 and the abolition of the non-resident assayers in 1870.

This is perhaps satisfactory enough but it may be that a proper understanding of the purpose of the scratched numbers will have some wider significance for the study of Victorian bronze coins. For one thing, in a period when three mints were at work, it may prove helpful to be able to identify some pieces from the years 1860-63 which can definitely be said to have been struck by the Royal Mint. More importantly, by enabling pieces of the various dates to be associated with cumulative output in tons, it may provide a welcome means of checking whether at that time the Royal Mint changed the date on coins punctually at the beginning of each new year. According to Sir John Craig,⁷ this was regular practice from 1864 but Michael Freeman's vast collection of pennies⁸ suggested a continuing degree of flexibility, with more coins of some dates, such as 1868, and less of others, such as 1864 and 1869, than might have been expected from the mintage figures for those years.

If anything, the scratched numbers seem to confirm the evidence of Mr Freeman's collection. Taking overall output first, a cumulative total of 220-30 tons was reached in 1864, but figures in this range occur on coins of 1863; 312 tons was reached in 1865, but the figure occurs on a coin of 1864; and 514 tons was reached in 1867, but the figure occurs on a coin of 1866. As for individual denominations, a total of 120-30 tons for the penny was not reached before April 1864, but figures in this range occur on coins of 1863; for the halfpenny, a total of 118 tons was reached in 1865, but the figure occurs on a coin of 1864; and for the farthing, a total of forty-one

tons was not reached until 1867 but the figure occurs on a coin of 1866. There is a need to be cautious in view of inadequacies in the surviving records but there may nevertheless be an indication here that the Royal Mint continued a flexible dating policy for bronze coins for a few years after 1864.

However that may be, I hope that we do at least now have an acceptable explanation for the scratched numbers. It is an explanation which is perhaps particularly satisfactory because it draws on the remarkable continuity in minting technique and practice which Professor Gaspar and I have found so helpful on other occasions.

NOTES

I am very grateful to Professor P.P.Gaspar, Mr E.G.V.Newman and Dr Ian Stewart for their helpful advice during the preparation of this paper.

1. Henry Garside, *British Imperial Copper and Bronze Coinage 1838-1925*, (Supplement, 1925), pp.5-6.
2. C.W.Peck, *English Copper, Tin and Bronze Coins in the British Museum, 1558-1958* (London, 1960), pp.421-25, 432-34, and 442.
3. Ian Stewart, 'Numbered Strikings of Victorian Bronze Coins, 1860-1868', *BNJ*, 39 (1970), 168-70.
4. Peck, p.420.
5. The main source of information on the introduction of the new bronze coins is PRO, MINT 8/36.
6. G.F.Ansell, *The Royal Mint*, third edition (London, 1871), p.163.
7. Sir John Craig, *The Mint* (Cambridge, 1953), p.323.
8. M.J.Freeman, *The Victorian Bronze Penny (1860-1901)*.

SHORT ARTICLES AND NOTES

A STEYNING COIN OF STEPHEN

Michael Sharp

The output of the Steyning mint has been thought to have ended with the striking of the last type of William II, type V. Elmore Jones in his paper on the coins from nearby Bramber¹ stated that no coin of Henry I or Stephen was known for Steyning. However, a coin of Stephen type VII, which I believe to be of this mint, has now come to light.

The coin reads + ---- ERT: O -- TEN. Since there appears room for only one letter between the space for the N of ON and the T of the mint reading and with the knowledge that the reading for Steyning in the reign of William II was usually STE or STEN, it is difficult to assign this coin elsewhere. The moneyer's name could be Rodbert, a moneyer known for Bramber from a unique coin of Stephen type VII in Moscow.² Type VII coins bearing the same name are also known for London, Canterbury and Hastings and were possibly the output of one man.³

Of the thirty-one Stephen coins listed in Moscow four from Sussex mints are recorded. This total has been increased by the attribution of No.21 to Lewes⁴ and perhaps No.38, a Stephen type VII reading AD: ON: ST, might turn out to be another coin of Steyning.

NOTES

1. F.Elmore Jones, 'The Stephen Mint of BRAN...: a New Attribution', *BNJ* 25 (1945-48), 119-24.
2. F.Elmore Jones and C.E.Blunt, 'A remarkable Parcel of Norman Pennies in Moscow', *BNJ* 36 (1967), 86-92. Pl.IV, 24.
3. Ian Stewart, 'The Sussex Mints and their Moneyers', in *The South Saxons*, edited by Peter Brandon (1978), p.126.
4. This attribution, in course of publication by Peter Seaby, is supported by the discovery of a Pevensey coin of similar type.



AN UNPUBLISHED FARTHING OF EDWARD I

J.J.North

It is exceptional to be able to record a new denomination for a mint in the intensely studied field of Edwardian coins and an illustration of the vagaries of survival in a coinage so amply represented in our collections. The farthing of Newcastle illustrated here (Wt.0.33g) cannot be totally unexpected in view of the halfpence struck there, since, prior to its discovery, it was the only mint in Group III apparently striking halfpence without farthings.

The obverse inscription E R ANGLIE without inner circle places the coin in the issue of light farthings at present associated with Group IIIg. However, the discovery of this piece from a mint only striking in Group IIle calls for a re-examination of this association. Doubts are re-inforced by the farthings of the same type struck at York mint, the latest pence of which are of Group IIIf. Two forms of hair punches are found on the farthings under consideration. It will be seen that those on the Newcastle coin are 'wire-line' terminating in a row of large separated crescents and this form has been noted on coins of London, Bristol and York. The second, probably later, variety is more bushy with a line of joined curls and is found on coins of London, Bristol and Lincoln. However, the key to any reclassification between Groups IIId and g must be the crown, as in the case of the pence and halfpence. On most light farthings this has side-fleurs resembling those on the pence of Group IIId, although some London coins have the crown with the spread side-fleurs, which are the criterion of Group IIIg. Applying this system, farthings of London, Bristol and Lincoln with the early crown can be assigned to Group IIId, Newcastle and York to IIle, and coins with the spread crown to IIIg. Of the latter, only London has been seen by the writer, but Bristol may well exist since both mints struck halfpence in IIIg. A further point in favour of such reclassification is provided by Lincoln mint for which no heavy farthings are known, although halfpence of IIIC were struck there.

The reverse of the Newcastle farthing reads NO/VIC/AS/TRI as do the halfpence of that mint, but unlike these it has the normal three pellets in each angle. The letter N has a pellet centre, a feature of the halfpence and many pence of IIle. The proposed re-attribution of the farthings has led the writer to examine the halfpence of the period with a view to correlating the two issues as far as possible. The present designation of IIIC seems somewhat restrictive for a group of coins having both types of drapery used to differentiate between Groups IIIC and d in the pence. Further subdivision to accord with these would probably produce unsatisfactory results, as the distinction is difficult to apply in the case of many pence, to such a degree that several eminent numismatists have eschewed it in the past. It is also doubtful whether it has the same chronological significance on the halfpence, since the hollowed drapery of IIIC is found on the halfpence of

Newcastle... In view of this it is proposed that these halfpence should be redesignated Group IIIc,d or c,e depending on the mint. The following summary demonstrates how the two denominations accord if the proposed reclassification is applied.

	Farthings	Halfpence
<i>Heavy</i>		
London	III c	III c,d
Bristol	III c	III c,d
York	III c	III c,e
<i>Light</i>		
London	III d	-
Bristol	III d	-
Lincoln	III d	III c,d
Newcastle	III e	III e
York	III e	-
x 3	London	III g
	Bristol	-
		III g
		x 3

This note seems an appropriate place to correct the reference in the Supplement to Brooke to a York halfpenny with a single pellet in each angle.¹ Such a coin would neatly complement the similar Group IIIe halfpenny of Newcastle, the only other royal mint striking in that northern group. Indeed, in his study of the halfpence and farthings of Edward I and II, Mr Woodhead remarked of the Newcastle coins 'no corresponding halfpence are known of any other mint although it might be expected that a similar coin of York would turn up', implying that he did not accept the entry in Brooke.² In an attempt to trace the coin, the writer approached Mr Blunt, who kindly provided details of the source of the entry. The coin cited was in the collection of Sir John Evans and is illustrated as Lot 2121 in the plates for the proposed sale of this, which did not take place as the entire collection was purchased by J.P.Morgan. Although the British Museum bought heavily from the collection, it is not in their trays of genuine coins or forgeries, indicating that it was probably suspect at that time. In the absence of the coin itself, one must fall back on the illustration for an assessment of its genuineness. Although the obverse appears to be of regular style, the vital single pellets in each angle of the reverse cross are suspect both in their size and positioning. Those on the Newcastle halfpence are large and centrally placed in each quarter, whereas the York pellets are small and in the angles of the central cross, where one of the pellets of the normal triangle is usually found. This is exactly what they are and both Mr Blunt and Miss Archibald are also of the opinion that the additional pellets have been erased on a genuine York halfpenny, slight traces of these being visible even in the photograph, especially in the TAS quarter.

NOTES

1. G.C.Brooke, *English Coins*, third edition (1950), p.257.
2. E.J.Harris, F.Purvey and P.Woodhead, 'Notes on English Halfpence and Farthings, 1279 to 1660', SCMB 1964, 126.

A CHESTER MINT MARK CORRECTED

H.R.Jessop

In the troubled times of Charles I's reign the city of Chester suffered a prolonged siege at the hands of the Parliamentarians, and on 31 January 1645 the defenders ordered that old plate to the value of £100 was to be made into coin to pay for the defence of the city and other outstanding debts. It would appear that the rare Chester half-crowns bearing the three garb mint mark resulted from this warrant, and the choice of this mint mark obviously derived from the old city arms which were three garbs (sometimes called gerbs) surmounted by a sword of state in pale. The coat of arms which had been used for many years is shown in Fig.1, which is taken from a map of the city made about 1600. The citizens of Chester were proud of their sword, for one was said to have been given to them by Richard II in 1394 and the existing one was carried before Henry VII when he visited the city a hundred years later. Until now no mention has been made of the sword when the mint mark is described. This may not have been noticed because the coins are usually struck on somewhat irregular flans, the edge of which often cuts across the mark, and they are seldom well struck up at this place. When a specimen occurs without these defects, the sword can be seen and Fig.2 shows this quite clearly. In the last quarter of the seventeenth century a system of hall marking was introduced for silver made in Chester and examples of these hall marks are shown (by courtesy of Mrs G.E.P.How) in Fig.3. The mark on the left is the beribboned sword, which is also the city's crest, the mark in the centre is the town mark, and the mark on the right is the date letter for 1686-90.

Now attention has been drawn to the sword it is hoped that the mint mark will be correctly described in future.



Fig.1



Fig.2 Enlarged

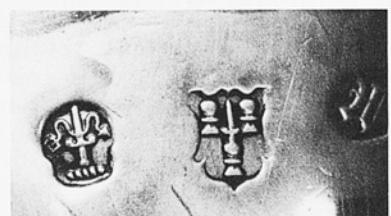


Fig.3 Enlarged

SOME ADDITIONAL NOTES ON THE CIVIL WAR COINAGE OF CHESTER

Michael Sharp

Further to Mr Jessop's discovery regarding the three garbs mint mark of Chester, it is worthy of mention that records, albeit for later dates, show that plume and single garb punches were also used to mark Chester plate.¹ Use of the former may account for the presence of plumes on the unite and two types of halfcrowns which are indisputably attributable to Chester. The use of the latter mark, the single garb, would seem to support the attribution of the halfcrowns and threepences with mint mark prostrate garb to Chester and with them the halfcrowns and shillings clearly of the same series but with other mint marks.²

Mr Lyall is of the opinion that Chester coins were produced by a press. I agree and feel there can be no doubt since, apart from the usual 'bowing' and 'pinching' features which are particularly evident on the halfcrowns, there are halfcrowns of Lyall types a/i and b/ii which have been struck from clashed dies, a feature one is not inclined to associate with use of the hammer. On such pieces traces of the impression of the arms on the reverse die are evident below the body of the horse (Illustration no.1).

It seems appropriate to record here the discovery of a third example of a Chester shilling of Lyall type d/vi (Illustration no.2). Although broken, this coin (said to have been found in an old house in Chester) shows a less worn portrait than the other specimens (Farquhar Lot 156 and Ryan Lot 1329). The unusually high relief of the portrait may have contributed to the severe breaks in the die.

The other two shillings, Lyall types e/vii and e/viii, are illustrated for comparison (Illustration nos.3 and 4) and I thank the Trustees of the British Museum for making these available for photography. I am also indebted to those numismatists who have so kindly made their Chester coins available for study.

NOTES

1. C.J.Jackson, *English Goldsmiths and their Marks*, second edition (London, 1921), p.387.
2. R.Lyall, 'The Chester Mint and the Coins attributed to that Mint', *NCirc* 79 (1971), 98-99.



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REVIEW ARTICLE

THE NELSON COLLECTION AT LIVERPOOL AND SOME YORK QUESTIONS

Ian Stewart

Sylloge of Coins of the British Isles 29 Merseyside County Museums. By Margaret Warhurst. London, for the British Academy, 1982. xxxii + 132 pp., 39 plates.

Volume 29 in the Sylloge series records more than eleven hundred coins from the Celtic period to the thirteenth century. The holdings of coins of this period in Merseyside County Museums, formerly the City of Liverpool Museums, are unusual for a public collection in that they largely derive from a single private collection which was bought intact when the owner died. Dr Philip Nelson (1872-1953) was a man of independent means who devoted much of his energy and resources to antiquarian pursuits. He was well known in numismatic circles for a number of publications including monographs on 'The Coinage of the Isle of Man' in *NC* 1899 and 'The Obsidional Money of the Great Rebellion 1642-1649' in *BNJ* 2 (1906). The papers written during his first period of numismatic activity (to 1916) were mostly devoted to coinages of the sixteenth, seventeenth and eighteenth centuries, but during the last ten years of his life he turned his attention to the coinage of York in the Anglo-Saxon period and between 1943 and 1950 he contributed seventeen notes on this or related subjects to the *Numismatic Chronicle*. At the same time he became an energetic collector of coins of the York mint. He combined this with a strong interest in the greatest of all the Anglo-Viking treasures, the 1840 hoard from Cuerdale, on the banks of the river Ribble near Preston, in which the earliest Viking royal coinages of York, in the names of Siefred and Cnut, were so strongly represented.

Among the groups of coins which came to the museums from other sources, mention should be made of a number of items from the Dark Ages which were presented by Joseph Mayer (1803-86). Mayer acquired the collections of Anglo-Saxon antiquities formed by the Rev. Bryan Faussett (1720-76) and by W.H. Rolfe (1779-1859), both of whom lived and collected in Kent. The most important part of the Mayer gift was the hoard of coin-ornaments from St Martin's, Canterbury which was republished by Professor Grierson in *BNJ* 27 (1953). Local finds from the north-west are represented chiefly by the important series of single finds from the beach at Meols, on the west coast of the Wirral, representing a lost settlement which was apparently abandoned in the late fourteenth century. Most of the Meols coins in this volume are of the post-Norman period, but several earlier items are included beginning with two Armorican billon staters.

Nelson's York collection begins with 120 Northumbrian stycas of the ninth century. In addition to the Cuerdale coinages, he had a useful group of nineteen St Peters, a few of the extremely rare issues of Anlaf and Eric Bloodaxe, and more than four hundred York coins struck between Edgar's reform and the time of Stephen. The York coinages of the late Anglo-Saxon

period represented in the volume are second only in importance to those of the Yorkshire collections (*SCBI* 21) and their value is enhanced by an important note by Mrs V.J.Smart on the York moneyers' names.

The series of Northumbrian Cuerdale coins at Liverpool amounts to 220 specimens, the largest group that has yet been published. Nelson acquired other Cuerdale coins when he could, and the St Edmund coinage of East Anglia is also well represented, while some Frankish and Kufic coins from the hoard are included at the end of the volume. In recent numismatic literature the date most usually assigned to Cuerdale is c.903, but this may be a little too early. As Mr Lyon has noted, among the West Saxon and Mercian coins of Edward in Cuerdale there are some of the second group of each of these series, in addition to those of the earlier phase in which features of the last coins of Alfred are continued. A burial date c.905 may therefore be more appropriate. The Cuerdale element in the Merseyside volume also brings out an interesting contrast with the hoard from Morley St Peter, near Norwich, recently recorded in full in *SCBI* 26 (East Anglia). Although containing a coin of Athelstan, and so buried not earlier than c.925, the Morley hoard is not a cross-section of the currency of eastern England at that date but consists in the main of two parts separated in date by ten or fifteen years. The later part has, as well as the irregular coinage in Edward's name from East Anglia which comprises the bulk of the hoard, a good run of English coins struck in the last few years of Edward's reign in eastern Mercia, after he had recovered the area from the Danes, and two of the Viking coins with the sword type which probably belong to the 920s. The earlier part of the hoard is of a date relatively close to that of Cuerdale. It includes a group of English coins of late Alfred and early Edward, with (like Cuerdale) a small admixture of coins of Guthrum-Athelstan. Curiously, the English coins in this part of the Morley hoard do not run as late as those at Cuerdale, being confined to the earliest phase of Edward's coinage, but the York series extends later, with several very early examples of the St Peter type but only one specimen of Cnut. It looks as if the various component groups in the Cuerdale hoard were not removed from currency at quite the same time, and the same must be true of the first part of the Morley hoard.

Nelson occasionally acquired other coins of the same period as his York collection, but this was sometimes accidental. For example, he had seven of the rare coins of Eadwig of the rosette three-line type (*BMC* II) which used to be attributed to York because the central line on some specimens reads ON+EO (the two Os are in fact annulets, and NE is a continuation of the word MO/NE from the bottom line). Among other non-York coins which found their way into Nelson's collection through misattribution is no.905, a unique Thetford (?) coin of Henry I's *Pax* type. But much the most interesting case is the 'church' type (*BMC* IV) of Athelstan.

There are no less than four specimens of this rare type in the Merseyside *Sylloge* (nos.440-43). Although doubts have been expressed on occasions,¹ the coins of this type have generally been attributed to York because those of the moneyer Regnald carry the York mint signature; and the apparently ecclesiastical nature of the design has led to the suggestion that they were issued for the archbishop of York.² In part this idea derives from the view that the archbishops, in whose own names coins had been struck in the days of the old English kings of Northumbria, had also exercised minting rights in the period immediately preceding Athelstan under the Vikings, at first in the time of Siefred and Cnut with coins that carried liturgical mottoes but no ruler's name, and thereafter with the coinage in the name of St Peter. But these propositions are themselves open to question.

Of the Cuerdale York coinages without a king's name, there are three types: Vb, with DNS DS REX obverses and York reverses (*SCBI Merseyside* nos. 374-75); VIa, with MIRABILIA FECIT obverses and reverses with the inscription DNS DS/O REX in two lines (nos. 377-84); and VIc, also with MIRABILIA FECIT obverses but with York reverses (nos. 385-97).³ Each of these types is die-linked into the coinage with royal names, but type VIa much less comprehensively than the other two. The rare type Vb and the relatively plentiful type VIc, both with the patriarchal cross on the reverse and connected to each other by a common reverse die, are intimately linked through their obverses with coins respectively in the names of Siefred (type Va) and Cnut (type VID) with the same reverse type. Type VIa, scarcer than type VIc although from more obverse dies (fourteen against nine), stands more apart from the rest of the series. Only one obverse die links this type with the coinage of Siefred (type VIb) and Cnut (type VID) and the two-line reverse type in this form is not found paired with any other obverse type (the extremely rare coins of Alvaldus have a similar reverse type, but reading DNS DS/REX without the O). On the evidence of the die-linking, therefore, types Vb and VIc do not have to be seen as the result of deliberate pairing of dies without a king's name and could have resulted from a degree of unconcern in the mixing of dies from a common pool, but the DNS DS reverses of type VIa do seem to have been made exclusively for use with obverses reading MIRABILIA FECIT. There are, however, possible explanations of this avoidance of a royal name in type VIa, even if intentional, other than as the identification of an episcopal issue. One is that there may have been occasions at this period when the kingship was in dispute, or even vacant. But it is well to remember that, apart from the coins of Siefred and Cnut which would themselves have been of extreme rarity without the chance discovery of the Cuerdale hoard, the great majority of the Anglo-Viking coins of the late ninth and early tenth centuries did not carry a ruler's name and special significance does not therefore necessarily attach to an anonymous issue. Although the archbishops of York probably had minting rights in the late Saxon period, their coins were not otherwise distinguishable from those struck for the kings after 867, and it seems best therefore to leave open the question of their having been so at the time of the Cuerdale coinages.

Whereas the anonymous coins of the York series in Cuerdale amounted to less than ten per cent of the total, the St Peter coinage of York constituted the great bulk of the Viking issues from northern England in the years between Cuerdale and 927. It hardly appears likely that more than ninety per cent of the surviving Anglo-Viking coins of this period would have been struck for the benefit of the ecclesiastical authorities, with the inference that royal or 'secular' coins may from time to time have been issued alongside them. Indeed, although widely assumed by numismatists and historians, this interpretation of the St Peters is not supported by the numismatic evidence. For analysis of the York coinage bearing the personal name Raienalt or Racnoldt, which may be attributed to Regnald I c.919-21,⁴ suggests that it did not accompany the St Peters but succeeded and replaced the swordless St Peter coinage (*SCBI Merseyside* nos. 414-26). This alone must cast very serious doubts on the supposed ecclesiastical nature of the St Peters. But the assumption is in any case intrinsically questionable, since there are countless examples to demonstrate that a saint's name does not of itself make an episcopal coinage in the middle ages. Indeed, such an explanation does not suit the St Martin coins struck at Lincoln in the 920s and copied from the post-Regnald St Peter type with the sword added (*SCBI Merseyside* nos. 427-32); there was no bishop of Lincoln in Anglo-Saxon times, when the principal church (later the cathedral) was not St Martin's but St Mary's.⁵

The St Peters therefore were probably issued by the leaders of the Danish community in York, using the name of the saint to whom York minster was dedicated, a coinage similar in kind to that in the name of St Edmund who was venerated in East Anglia.

There is thus no clear evidence to indicate that the archbishops of York ever had independent minting rights under the Vikings before Athelstan and it is equally difficult to detect the exercise of any such privilege during the period of revived Viking rule in the 940s. The case of Athelstan's 'church' type should accordingly be considered on its own and without the support of a pattern of episcopal coinage at York in the time of his Viking predecessors. The type indeed seems to be ecclesiastical in concept; the design could be seen either as a church or as a shrine, it is raised on a plinth, but also appears to be set on a ground line. It is somewhat reminiscent of the Carolingian temple type and of its German version, the *holzkirche*, best known in the Otto/Adelheid coinage from the end of the tenth century but first used in the reign of Athelstan's contemporary, Henry the Fowler (918-36). But whether an ecclesiastical design should be taken to denote an ecclesiastical coinage is another matter. The Athelstan case is not obviously different from his father's church and reliquary types which were part of the normal royal coinage at Chester in the middle of the reign of Edward the Elder (899-924). Further, it may be relevant to note that Athelstan was the first Mercian or West Saxon king since Offa to deny the archbishop of Canterbury the right to a distinctive coinage of his own.

The 'church' type coins of the moneyer Regnald are the only York coins of Athelstan not to carry the title *Rex To Brit*. As such they seem unlikely to have been an intrusion into Regnald's long series of circumscription type, and the natural place for them would be at the start of his coinage. During most of the tenth century prior to Edgar's reform, the York mint was managed on a different basis from most other mints in the country, and a very small number of moneyers, sometimes only a single master-moneyer such as Regnald under Athelstan, was named on the coinage. But in the 'church' type there are five moneyers in addition to Regnald and where their associations are known they are not with York. The moneyer Frotier (SCBI Merseyside no.441) could be the same man as struck the circumscription type (with both cross and rosette) at Shrewsbury, with the spelling Frotger. Turstan might be identified with Thurstan of Leicester in the circumscription-cross type. The 'church' type coins have certain features in common, such as the exceptional spelling of the king's name AED(E)LSTAN, with A and E as separate letters and D for *thorn*, and the three wedges at the end of the obverse inscription. But they differ in style and in the use of ornaments and do not seem all to be the work of the same engraver.

There is therefore some question whether all the coins of the 'church' type were struck at York. If not, a possible explanation would be to see them as a Mercian issue produced early in Athelstan's reign, which was extended to York when the Viking rulers were driven out in 927, York being named to mark Athelstan's repossession of it for the English. If the type was in fact struck at several mints, however, it would differ in that respect from most, perhaps all, of the other pictorial types of the tenth century. It also (unlike Edward's) stands on its own, and it may therefore have been chosen for some special, and perhaps exceptional, purpose.

This is one of many topics for which the Merseyside *Sylloge* provides valuable material. It is a rich collection, admirably recorded by Mrs Margaret Warhurst, and the volume is an important addition to English numismatic literature.

NOTES

1. For example by M.Dolley and C.N.Moore, 'Some Reflections on the English Coinage of Sihtric Caoch, King of Dublin and of York', *BNJ* 43 (1973), 45-59 (at p.54)
2. The question is fully discussed by C.E.Blunt in 'The Coinage of Athelstan, 924-939: A Survey', *BNJ* 42 (1974), 35-160 (at pp.91-92); cf. *NC* 6th series 20 (1960), Presidential Address, p.xiii.
3. For an analysis of these coins and classification see C.S.S.Lyon and B.H.I.H.Stewart, 'The Northumbrian Viking Coins in the Cuerdale Hoard', *Anglo-Saxon Coins*, edited by R.H.M.Dolley (1961), pp.96-121 and 'The Classification of Northumbrian Viking Coins in the Cuerdale Hoard', *NC* 7th series 4 (1964), 281-82; and I.Stewart, 'The Early Viking Mint at York', *SCMB* Dec. 1967, 454-61.
4. C.E.Blunt and I.Stewart, 'The Coinage of Regnald I of York and the Bossall Hoard', *NC* forthcoming.
5. I.Stewart, 'The St Martin Coins of Lincoln', *BNJ* 36 (1967), 46-54.

REVIEWS

'Sceattas and other Coin Finds' by Kirsten Bendixen, in *Ribe Excavations*, vol.1, edited by M.Bencard. Esbjerg, 1981, pp.63-101.

Until quite recently finds of sceattas were unknown in Denmark. There had been two or three base gold Merovingian coins, but that was all. The discovery, in less than two decades, of some 120 coins thus changes our ideas about the monetary history of eighth-century Denmark in a dramatic and exciting way. The finds have wider implications, too, for trade and contacts in the North Sea basin at a time preceding the earliest documented Viking raids on western Europe.

The find-spots of the coins are as follows: one was excavated at Hedeby, and another was a chance find within the ramparts there. Ten are single finds from excavations at Dankirke, just to the west of Ribe (on the west coast, nearly 100 km north of Hedeby), and these include an interesting range of types. Thirty-two are single finds from excavations at Ribe itself, and these are mostly Frisian 'Wodan-monster' or porcupine sceattas. Seventy-seven constitute a hoard from the island of Föhr, off the west coast but north of Hedeby, and these (which remain to be published) are mostly porcupines, and Merovingian types, but among them is the 'plumed bird' porcupine type for which an English origin has been argued.

All this adds up to impressive archaeological evidence for trade between Frisia and Jutland covering about a hundred years prior to the Krinkberg hoard of coins of Charlemagne. The earliest find from Dankirke is a pale gold tremissis of Dorestad, and next are two silver coins of the same moneyer. These early coins (together with those from Gadegaard, Föhr, and Sild) amount to clear evidence of a persistent monetary penetration from the later seventh century onwards, even if on a more limited scale than in the middle of the eighth century.

One question, of the many that arise, is of special interest to English numismatists; what of the allegedly English coins found in Denmark? They need not, of course, have travelled direct. It seems more probable, *prima facie*, that they were carried from Frisia, whatever their mints of origin. Given the delicacy of this question, Mrs Bendixen's approach to the specimens of BillB and BMC Type 37 - two stylistically related types for which a Mercian origin has been proposed - leaves much to be desired. The style, weights, and (probably) the alloy of nos.42 and 43 in her catalogue distinguish them as imitative. Where were they made? More intriguing still, the same two types reportedly occur in the Föhr hoard. Whether the 'plumed bird' coin(s) in the same hoard look 'official' or imitative, we must wait to see.

The coins are all well illustrated by enlarged photographs, and Mrs Bendixen is to be congratulated for putting them on record so clearly and thoroughly. One would have appreciated site-plans showing where these precious coins were found, one by one; and - since the question must eventually arise whether any of the Wodan-monster coins are imitations of Danish mintage - it is to be hoped that the most expert metal analysis will in due course be applied to them, in order to secure all possible physical data as a basis for judgement.

D.M.Metcalf

Catalogue of the Early Northumbrian Coins in the Museum of Antiquities, Newcastle upon Tyne

By Elizabeth J.E. Pirie. iv + 30 pp., incl. 5 plates illustrating 189 coins.

Between 1814 and 1933 the Society of Antiquaries of Newcastle upon Tyne accumulated a collection of well over 400 coins of the Anglian kingdom of Northumbria, and it is these, transferred to the Museum of Antiquities in 1960, that are the subject of the present catalogue. The core of the collection was a parcel of 210 coins acquired by the Society direct from the 1832 Hexham hoard of ninth-century coins of Northumbria, and it is the Hexham hoard also that lies behind its other major constituent, a gift of around 225 coins (including thirty-odd forgeries) from a Northumbrian landowner, Sir Horace St Paul; there is some uncertainty about how many of St Paul's coins derived from the hoard, but, if this reviewer understands Miss Pirie correctly, she believes the total to be 130 (seventy-five vouched for as being from the hoard and as once having been his by John Adamson, the Newcastle antiquary who first published the hoard and who catalogued St Paul's coins for the Society in 1853, and fifty-five not so vouched for by Adamson but probably also from the hoard).

The collection is thus substantial and a key source of evidence for the composition of the Hexham hoard. It should be recorded that it contains other coins of significance, notably one of King Alchred; a most handsome coin of Archbishop Eanbald found at Coldingham in Berwickshire; and one of the celebrated coins long attributed to the seventh-century Northumbrian king Ecgfrith but now regarded, at any rate by those numismatists who have studied the Northumbrian series, as early-nineteenth-century forgeries.

Nevertheless it is for the Hexham coins that the catalogue will mainly be consulted and here it is necessary to enter one caveat about Miss Pirie's publication of them. One of the salient features of the Hexham hoard is that unlike other mid-ninth-century hoards of Northumbrian coins which end with coins of King Osberht (traditional dates 849-67) and have extensive representation of coins of Osberht's predecessor Aethelred II (traditional dates 841-44 and 844-49, with an interval in 844) by a moneyer Eardwulf, it contained no coins of Osberht and only a small number of coins of Aethelred by this moneyer. Numismatists have deduced that the hoard was deposited early in Aethelred's second reign and that Eardwulf's period of activity as a moneyer had then only recently commenced. In the section of comment on the Hexham hoard which Miss Pirie supplies as part of her introduction she hints that this may not be her view of the situation but does not develop her ideas in detail. She does however ascribe to the Hexham hoard, without comment, a few coins in the Newcastle collection which seem to this reviewer likely to be later in date than any of the much larger group of coins from the hoard preserved in the British Museum, and there is a danger that these coins will in future be regarded as certainly from the hoard, whereas in fact the position is not so simple.

Of the coins illustrated on her plates which she associates with Hexham two, nos. 374 and 439, fall into this category; both are derivative pieces later than the early phases of the coinage struck for Aethelred II by Eardwulf and neither seems to belong to the period of Aethelred II's reign prior to the deposit of the Hexham hoard. It is likely that among the coins she identifies as Hexham coins but does not illustrate there is more than one other interloper, for of the coins of Aethelred by Eardwulf in the collection she associates five certainly and six others possibly with the hoard, although the parcel from the hoard in the British Museum seems to contain seven such

coins only out of a total number of coins over twice the size of the total Newcastle Hexham holdings.

It will be open for Miss Pirie in the future to argue that this reviewer is wrong about the position in the series of coins nos. 374 and 439, and to argue that the British Museum parcel is not fully representative of the Aethelred-Eardwulf element in the hoard; but for the time being numismatists should be on notice that nos. 374 and 439 and some of the unillustrated Eardwulfs may not really be Hexham coins. In this context, it can be deduced from Miss Pirie's tabulation on p.6 of the respective compositions of the Society's parcel acquired direct from the hoard and of the St Paul coins claimed to be from it that coin no. 374 at least is a St Paul coin, for the Society's original parcel contained no obvious derivative items; and if it and the other coins under discussion can be shown to be St Paul coins, it should be feasible to disassociate them from Hexham on the grounds that the year 1853 when Adamson vouched for them as being from the hoard was almost a generation after the discovery and that Adamson's recollection as to the Hexham provenance of any particular coin may by then have been faulty.

Having made this caveat it is proper to say that we should be grateful to Miss Pirie for cataloguing the Newcastle collection and for illustrating as many of the coins as she has done. In a perfect world one could wish that all the coins had been illustrated, as they would no doubt have been had the catalogue been issued as a volume in the SCBI series, but one must be thankful for what one gets and it is understandable that the Museum of Antiquities should have blenched at the prospect of raising the finance to illustrate the whole collection.

H.E.Pagan

Cardiganshire Silver and the Aberystwyth Mint in Peace and War

By G.C.Boon. Cardiff, National Museum of Wales, 1981. xiii + 287 pp. Frontispiece and 66 text illustrations. £25.

In this story of the connection between Welsh silver and mint output during the reign of Charles I, Mr Boon has placed more emphasis on historical than on numismatic details. In doing so he has gone into the documentary evidence with great care and subjected the secondary sources to close scrutiny. The upshot is a blend of leisurely narrative and clear-headed analysis which will be of benefit to beginner and specialist alike.

The book begins, as it should, with the mines; Part I describing in some detail the activities of the two great entrepreneurs Sir Hugh Myddelton and Thomas Bushell. Because the ores were good Mr Boon is inclined to believe that the claims made by these men in respect of their earnings are broadly correct, but he judiciously warns that in both cases to equate earnings with profits would be overly optimistic. The costs of drainage, which Bushell in particular incurred through driving adits into the mines, and of wages were always great and, consequently, a much higher level of output than was ever actually achieved would have been necessary before either Myddelton or Bushell could have enjoyed high profit margins.

Parts II and III are devoted to minting, first at Aberystwyth, then at

the other royal mints, and finally at Aberystwyth again. Throughout, Mr Boon keeps a firm eye on the supply side of the equation, indicating in so far as he can the quantities and sources of the bullion used; on the personnel responsible; and on the output, very largely silver, which resulted. Although, naturally enough, much of this is fairly familiar ground, it makes up a well-told story and this, in turn, forms the basis for some most rewarding comment concerning both the striking of coins and the location of some of the mints. Because students of the series have come increasingly to recognize that a far more considerable place needs to be found in the early Stuart period for the use of coinage machinery than has hitherto been allowed, Mr Boon's arguments in favour of the rocker press being used at Aberystwyth are most welcome. And by the same token, when students have become increasingly sceptical of some of the attributions which have customarily been made in respect of Charles I's issues, it is excellent to see Mr Boon's attempt to knock some sense into the discussion by expanding his earlier remarks in connection with Aberystwyth and Dyfi Furnace, and making fresh assertions in connection with the B coins (Bridgnorth) and the 1645 A coins (Ashby). The limited nature of the evidence means that we may still only speak in terms of probabilities rather than of certainties but thanks to Mr Boon the debate has shifted towards more acceptable ground.

Last, but by no means least, come the Appendices of documents prominent amongst which are Bushell's mint indenture (30 July 1637), the Aberystwyth mint account book (1638/9-1642), Bushell's *Remonstrance* (1642), and Bushell's *Case...truly stated* (1649). The last two are both in facsimile. Obviously, each of the documents has a part to play in the story which Mr Boon tells but, equally obviously, such a large body of documentation will also have wider significance and the National Museum of Wales is to be congratulated in making it so readily available to the numismatic world. All in all, this is a most welcome book which will serve us well for many years to come.

C.E.Challis

The Splendid Shilling

By James O'Donald Mays. New Forest Leaves, Burley, Ringwood, Hampshire, 1982. 186 pp. Illustrations in text. £7.95.

This is an eminently readable book, the sort of book which could well encourage a younger reader to take a more serious interest in the subject. For the specialist, it contains all sorts of information of stories and customs concerning this particular denomination that he is unlikely to find in a technical work of reference. Only very recently, I purchased a small parcel of coins, soon afterwards to be asked 'for the return of the new 1912 shilling, if it be there'. Dr W.Gordon Sears (now deceased), well known as an author of nursing text books (and, incidentally, father of actress Heather), I knew had been a pupil at Christs Hospital; having read this book I now know that he received the Lord Mayor's shilling (pp. 151-52). The author deals primarily with English shillings, touching on those of Europe, Scotland and Ireland, and the British Commonwealth, past and present. In recent times, decimalisation has seen the end of the shilling, if only in name.

Errors have crept in, many of a minor nature, but errors none the less, which would mislead the younger, impressionable reader. A provincial reader might wonder where Durham House was (p.24): it was formerly the palace of the bishops of Durham in London, situated south of the Strand where it doubtless fronted to the river. It is now in John Adam Street, until recently better known as Stanley Gibbons Publications Department. Forgeries of Philip and Mary shillings dated 1554 and 1557 are noted (p.32): these are undoubtedly of the very rare varieties with date below bust, both by Emery (*BNJ* 40 (1971), 166-67), the latter a concoction. A variety of Elizabeth shilling with the queen holding a sceptre (p.34) is unknown to me. James I shillings with Welsh plumes over shield (p.41) are not rare: James II shillings with Welsh plumes in centre of reverse certainly are (three known), but are not mentioned (p.60). Students are agreed that issues formerly attributed to Coombe Martin (p.45), can safely be assigned to Furnace, Aberystwyth. The Carlisle shilling (p.50) does not occur other than round. The 'Caroli Fortuna Resurgam' pieces (p.51) are controversial to say the least (see *NCirc* 90 (1982), 229-31) if for no other reason, they bear no mark of value. One would infer that the legends CAROLVS SECONDVS and HANC DEVS DEDIT (p.52) appear on one coin, which they do not. Silver tokens generally are not rare (p.90); that of Mackintosh & Degraves, Tasmania (p.94), certainly is, but not so rare as to be represented only in a few great museums. Coins of Edward VIII (p.112) were also issued for Kutch (N.W.India) but without a portrait.

Several of the coin illustrations could have been better, as indeed could the quality of the specimens chosen for illustration, viz. Henry VII, Philip and Mary, Charles I (Tower and Carlisle), and Charles II. On p.142 the top two illustrations are transposed. Even younger readers would not acknowledge Phillip (sic) Whitting and this older reader has only ever known Jock Murray as Lt.Col.J.K.R.

P.D.Mitchell

The Casting-Counter and the Counting-Board, A Chapter in the History of Numismatics and Early Arithmetic

By Francis Pierrepont Barnard. First published Oxford University Press, 1917. Reprinted Fox, Castle Cary, 1981. 357 pp., 63 plates. £30.

Reprints normally escape the attention of the reviewer. Here is a notable exception. The reprinting of Professor Barnard's voluminous work is in itself a noteworthy event, and how pleasing to record that the new volume matches the original. The book is sturdily bound. The quality of the paper (120 gsm toned art) is extremely good and the illustrations in litho reprint even clearer than the originals in the Clarendon Press volume. The price of £30 is extremely reasonable for such a handsome book, containing so many superb plates. It is good to know that 'Barnard' is now available to all.

It would be churlish of me to criticize Barnard's work, which appeared nearly seventy years ago, but I feel that a few cautious comments would not be out of place. Obviously the chief value of this reprint to the modern scholar lies in the photographic illustration of more than 600 counters - English, French, Flemish, Italian and German - from Barnard's own collec-

tion, which was bequeathed to the Ashmolean Museum, Oxford. The student of the history of mathematics will undoubtedly find Barnard's chapter on the actual methods of calculating on the board as recorded by sixteenth-century mathematicians such as Recorde, Awdeley, Reisch, Cusanus and Kobel, just as fascinating as the author's contemporaries did.

The student of jettons, however, must treat some of Barnard's attributions with the greatest caution. Although he was a professor of medieval archaeology, Barnard rarely used archaeological evidence in his chronology. He failed to realise that the so-called Anglo-Gallic series was, in fact, purely English, and that some of the dies for the sterling head jettons were actually made with the same irons and punches as the dies for the Edwardian mint pennies.

Some of Barnard's attributions of the early French series are very fanciful. He did not realise that some of the common pieces such as the 'mouton' or 'dauphin' types were not confined to Berry or Dauphiné, but were struck in many regions of France. His coverage of the Nuremburg rechenphennig is extensive, but many of the earlier Nuremburg pieces were unrecognised, and he did not know that there were several Wolf Laufers and Hans Krauwinckels. Thus his attempted dating of many of the signed pieces is open to question.

Nevertheless, 'Barnard' remains the standard work and a reprint was long overdue. One hopes however that a more up to date survey of jettons used in this country, put in an archaeological context, will appear in the foreseeable future.

George Berry

Tavern Tokens in Wales

By Neil B.Todd. Cardiff, National Museum of Wales, 1980. xxvi + 236 pp.
£8.

In this lavish and almost fully-illustrated catalogue Dr Todd has fulfilled his objects of identifying the relevant checks (this was the contemporary term, actually appearing on fourteen of the pieces included) and, through valiant efforts, of dating as many as possible. Further refinements in dating will be made, such as a *terminus post quem* for p.95, no.120 of 1893, the year in which Navigation was renamed Abercynon; but such is inevitable. Of greater concern is the likely completeness of the corpus. Pub checks would seem to be characterized by limited output and uncollected specimens; and a small group of nineteen Welsh pieces which could not be notified before publication includes no less than ten new types.

The arrangement by counties calls for no comment, but the choice of headings does. In accordance with the principle of autonomy announced on p.xxi, separate headings should have been provided for various parishes (civil and ecclesiastical) which are subsumed in Flint, Aberdare, Bridgend, Cardiff, Treherbert, and Abergavenny. Moreover, Bridgend and Llantrisant are given localities which belong elsewhere. All this points up the lack of an index to places. Since the work is not in Welsh the place name on pp.25-35 should be Aberavon. The annotations to p.109, no.161 and to p.188, no.79 would have benefited from use of the gazetteers in the bibli-

graphy. Despite the imprint the text evidently does not carry the authority of the National Museum of Wales.

These criticisms are peculiar to Wales. If the work is used as a model for future publications two aspects ought to be improved. The notation is unnecessarily complicated, requiring both number and county, except that there are confusing interpolated sequences for Cardiff, Swansea and Newport. New discoveries will hardly be accommodated thereby in their proper position, and a single numerical sequence would have been much better. Secondly, the legends should be transcribed, for the illustrations are not always legible. Transcription might indeed help the cataloguer, witness p.5, no.11 (no.7 is also by Bird), and p.181, no.27 (by H.Smith, dated for example on p.175).

The provision of illustrations is, however, a great boon, going beyond the individual entry to provide evidence for dating by style, evidence of die-linking (the author might like to reconsider whether this does necessarily indicate a common manufacturer), etc. Dr Todd has therefore given us a valuable collection of material, not particularly well organised, but a stimulus and a contribution to further work.

R.H.Thompson

Studies in Numismatic Method presented to Philip Grierson

Edited by C.N.L.Brooke, B.H.I.H.Stewart, J.G.Pollard and T.R.Volk. Cambridge University Press, 1983. xxx + 337 + (1)pp., including 21 plates and other text illustrations. £50.

This volume is the first collective tribute that the numismatic community has paid to one of its most distinguished figures, and a glance at the list of contents will show the calibre of the contributors and the wide range of subjects covered. It is no exaggeration to say that Professor Grierson has more successfully combined the roles of historian, student of coinage and coin collector than any numismatist living and working in Britain in the century and a half since the emergence of numismatics as an independent discipline, and it is satisfactory to be able to report that each of the twenty-three essays in this volume exhibits that application of intellect to mere fact that has been the distinguishing characteristic of Grierson's own contributions to numismatic science.

Eight of the contributions relate to Greek, Roman or Byzantine numismatics and thus fall outside the proper boundaries of a review in this *Journal*, although it is no doubt permissible to remark that the overall standard of these seems very high indeed. The remaining contributions all relate to aspects of the coinage of Western Europe between the beginning of the eighth century and the end of the fifteenth century, and here the student of the British coinage will find much that is relevant, directly or indirectly, to his own studies.

Many of us will no doubt turn first to one or other of the essays on British or British-related topics by the familiar quartet of Dolley, Blunt, Archibald and Stewart, each in its own way characteristic of its author but all offering unfamiliar themes or lines of thought. Dolley, for example, who writes on the coinage of Aelfred, steers so clear of sexennial-cycle polemics

that he not merely forgives Aelfred what he sees as Aelfred's conscious abandonment of periodic recoinage as a weapon of monetary policy, but hails it as 'imaginative' and 'statesmanlike'; while Blunt, discussing privy marking on the English coinage in the fourteenth and fifteenth century, casts himself in the unexpected role of the champion of the opinions of W.J.W. Potter against those of Brooke and Lawrence.

Ian Stewart and Marion Archibald look wider afield, the former unravelling the wide but curiously fragmented impact of Scottish coin types on the other coinages of Western Europe, and the latter making sense of the coin nomenclature used in the account books of the Netherlands-based Scottish commission merchant Andrew Halyburton at the end of the fifteenth century. The monetary relations between Britain and North-Western Europe are also the prime concern of Dr Hatz's essay on finds of Anglo-Saxon coins and mediaeval English coins in Schleswig-Holstein.

Among the other contributors, Dr Spufford writes with authority on mint organisation in the Netherlands in the fifteenth century; Dr Metcalf's note on the alloy of the Merovingian silver coinage, although offering no very decided advances in knowledge, does admirable service in publishing the hundred such coins in Grierson's own collection (and those who fancy themselves as interpreters of problem coins can wrestle happily with the task of assigning the last fifteen of these to their proper places of origin); and Mme Dumas is interesting on the occurrence of personal names on the obverses of coins struck in the duchy of Normandy at the end of the eleventh century, although her theory that the names are those of local Norman magnates rather than those of moneymen will eventually need more evidence in its support than she is able to adduce at present.

This reviewer feels rather less happy about the proposition advanced in M.Lafaurie's contribution to the volume that references in Carolingian capitularies to measures against coin forgery indicate that changes in coin type were simultaneously being put in hand, and his consequent conclusion that there were changes in coin type in 854 and 861 as well as at other more familiar dates in the ninth century. The proposition is a bold one and although Lafaurie's arguments are no doubt worth consideration, it is not clear that he is on the right track. Rather oddly, the very same capitularies are discussed in Dr Suchodolski's paper which immediately follows it in the volume, and although Suchodolski's purposes are different it must be said that he manages to render a key passage from a capitulary of 819 in a more accurate and intelligible manner than the one in which the editors have allowed it to appear in Lafaurie's paper.

The volume's published price will no doubt depress immediate sales and it may be that the numismatic public would be well advised to wait and see if it is offered in due course at book sale or remainder prices; but in the long term it will represent solid value on its purchasers' shelves and if in some future epoch barter again becomes a feature of our national economy *Studies in Numismatic Method* might not pay one's medical bills but it could well clear one's account with the coin trade.

H.E.Pagan

The Scottish Antiquarian Tradition. Essays to mark the Bicentenary of the Society of Antiquaries of Scotland and its Museum, 1780-1980

Edited by A.S.Bell. Edinburgh, John Donald. x + 286 pp., 9 plates, illus. in text. £15.

Some of these essays deal with one or more men and their place in the Scottish antiquarian tradition, including lively personal recollections from Angus Graham of those who dominated the scene shortly before and during World War II. Others deal with a theme over a longer period. Dr Ian Stewart's 'Two Centuries of Scottish Numismatics' is the most interesting to readers of this *Journal*, although not primarily aimed at such specialists. He reviews the nature of the material, gives reasons for the prominence of collector-students, and briefly recounts the development of the coinage itself, explaining that hoards can still revolutionise our knowledge of the earlier periods. He then gives a chronological account of published work and major collectors, in fact beginning earlier than 200 years ago, and concludes by mentioning new trends in numismatic studies. A comprehensive bibliography, with some comments, supplements the essay. Dr Stewart gives due prominence to the great advances made by Edward Burns, in *The Coinage of Scotland* (1887), using scientific techniques well ahead of other work in medieval numismatics. Apparent omissions in this thoughtful essay are explained by the coverage of Dr R.B.K.Stevenson's history of the museum (national since 1851). This includes the growth of the collection, in which coins were always important; the treatment of treasure trove; and the work of (honorary) curators of coins and others to whom we are indebted.

J.E.L.Murray

THE PUBLICATIONS OF F.ELMORE-JONES

Francis Elmore-Jones (1898-1982) was elected to the Society in 1938. He served as Treasurer from 1946 to 1954 and was elected a Vice-President in 1955. In 1956 he was awarded the Sanford Saltus medal of the Society. He was made an Honorary Member in 1973, and in 1977 volume 47 of *BNJ* was dedicated to him on the occasion of his eightieth birthday.

Thanks to Mr Mitchell's excellent obituary notice in Spink's *Numismatic Circular* (1982, p.52), we already possess a lively and judicious appraisal of FEJ. As its own tribute, the Society wishes to complement what has already been so well said by recording in detail his published contribution to numismatic scholarship. In fact, the list which follows has been compiled by our President, Mr J.D.Brand, but I am pleased to have the opportunity of prefacing it with a purely personal reminiscence. Always a true and courteous gentleman, FEJ was to me, as he was to so many others, a kind, wise and generous friend.

I first met him when I became a regular attender at Baldwin's Saturday morning sessions in the early 1950s. Presided over by the late Albert Baldwin and much enlivened by his trenchant wisdom and tart good humour, these were occasions essentially for informal numismatic discussions and for the leisurely and collective viewing of coins newly acquired or lately come to light. FEJ was there most Saturdays, as were many of his numismatic friends (there were usually at least half a dozen of us), and it was he, more than anyone else, who through discussion and example deepened and expanded my interest in medieval numismatics. It was he, together with Albert Baldwin, who proposed me for membership of our Society in 1952.

Following our morning sessions at Baldwins we would pursue our discussions further in a local pub. Afterwards, if he was not off to Lords to watch a cricket match, we would make our way to the British Museum where, in those far off and unrestrictive days, Michael Dolley would let us have access to the cabinets, then still in their wartime quarters in the East Wing.

It is the FEJ of those days that I most like to remember: a man possessed of an unerring eye for a coin and a quite incredible visual memory for a die. He was always ready to explain and discuss and, while never discourteous or assertive, would clarify and rationalize arguments with impressive ability. He was, as Michael Dolley rightly said, a natural scholar and it is his published scholarly achievement that we now set out in full.

P.Woodhead

1946

1. 'Short Cross Pennies' (anon. but reprinted with additions in 1948 under his name), *SCMB* July, pp.4-6.

1947

2. 'The Stephen Mint of BRAN...A New Attribution', *BNJ* 25ii, 119-24.
3. 'An Unpublished "Mule" of Stephen', *BNJ* 25ii, 230-31.

1948

4. 'The Last Short-Cross Issue of Henry III (Class 8)', *BNJ* 25iii, 286-90.
5. 'Short Cross Pennies', in *Notes on English Silver Coins 1066-1648*, edited by H.A.Seaby, pp.9-13.

1949

6. 'Hedon near Hull - A New Norman Mint', *BNJ* 26i, 28-30.

1950

7. 'The Short Cross Coinage and the Question of a Civil War' (letter), *NCirc* 58, 529-30.

1952

8. 'A Find of Edward Pence at Chester' (with R.H.Dolley and G.Webster), *BNJ* 27i, 91-92.

1953

9. 'New Light on the Abbot of Peterborough in the Norman Period', *BNJ* 27ii, 179-81.

1955

10. 'Some Corrigenda to the Two Volumes of the British Museum Catalogue of Anglo-Saxon Coins' (with C.E.Blunt and R.H.M.Dolley), *BNJ* 28i, 57-59.
11. 'An Intermediate Small Cross Issue of Aethelraed II and Some Late Varieties of the Crux Type' (with R.H.M.Dolley), *BNJ* 28i, 75-87, Pl.4.
12. 'An Unpublished Mule of Edward the Confessor', *BNJ* 28i, 189-90, Pl.14.
13. 'Thoughts on the Norman Coinage of Wales in the Light of Two Additions to the Series', *BNJ* 28i, 191-95, Pl.14.

1956

14. 'The Mint "aet Gothabyrig" and "aet Sith(m)estebyrig"' (with R.H.M. Dolley), *BNJ* 28ii, 270-81, Pl.22-23.
15. 'A Preliminary Note on an Intermediate Small Cross Type of Aethelraed II in Relation to Late Varieties of Crux' (with R.H.M.Dolley), *NCirc* 64, 5-8.
16. 'A New Sussex Mint', *NCirc* 64, 165-66.

1957

17. 'The Tenth-Century Mint "aet Weardbyrig"' (with C.E.Blunt), *BNJ* 28iii, 494-98, Pl.37.
18. 'Stephen Type VII', *BNJ* 28iii, 537-54, Pl.31.
19. 'An Unpublished Penny of Henry I', *BNJ* 28iii, 652-54.

20. 'An Unpublished Variant of the Crux Type of Aethelraed II', *NCirc* 65, 57-58.
 21. 'An Unpublished Penny of Edward the Confessor', *NCirc* 65, 157-60.

1958

22. 'A Parcel of Cross-and-Crosslets Pence from the Tealby Find' (with R.H.M.Dolley), *BNJ* 29i, 82-86, Pl.5.

1959

23. '"Edwardus Rex Ain" : de Bury or Hatfield? - A New Approach to an Old Problem', *BNJ* 29ii, 326-33, Pl.27.
 24. 'Two Unpublished Barnstaple/Exeter Die-Links', *BNJ* 29ii, 417-18, Pl.28.

1960

25. 'The Mint of Axbridge', *BNJ* 30i, 61-69, Pl.6.
 26. 'A new Mint for Stephen Type VII', *BNJ* 30i, 188-89, Pl.11.
 27. 'Some Remarks on *BMC* Type VII Var. B of Edward the Confessor' (with R.H.M.Dolley), *NC* 6th series 20, 183-90, Pl.14-15.
 28. 'A New Suggestion Concerning the So-Called "Martlets" in the "Arms of St Edward"' (with R.H.M.Dolley), in *Anglo-Saxon Coins: Studies Presented to F.M.Stenton on the Occasion of his 80th Birthday, 17 May 1960*, edited by R.H.M.Dolley (1961), pp.215-26, Pl.15.

1961

29. '"Edwardus Rex Ain" - A Further Postscript', *BNJ* 30ii, 363-65.
 30. 'The Transition between the "Hand of Providence" and "Crux" Types of Aethelraed II' (with R.H.M.Dolley), in *Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis*, I, 175-86.

1962

31. 'Four Anglo-Saxon, Norman, and Plantagenet Notes: The Mysterious Mint of "Dernt"; Two Unpublished Pennies of William II; Stephen Type VII - Four "New" Coins; An Unpublished Edward III/Edward II Mule', *BNJ* 31, 66-73.

1963

32. 'An Unpublished Penny of William I', *BNJ* 32, 91-93.

1964

33. 'Norwich or Northampton - A "Short Cross" Problem', *BNJ* 33, 70-72, Pl.7.
 34. 'Four "New" Coins of the Huntingdon Mint', *BNJ* 33, 168-69, Pl.7.

1965

35. 'The Buckingham Mint' (with R.H.M.Dolley and D.J.Elliott), *BNJ* 34, 46-52, Pl.4.
 36. 'The Episcopal Marks on the Coins of the Prince-Bishops of Durham' (letter), *NCirc* 73, 5-6.

1966

37. 'The Emergency Mint of Wilton in 1180' (with J.D.Brand), *BNJ* 35, 116-19, Pl.15.

38. 'A Rare Penny of William I from Cirencester' *NCirc* 74, 92.
 39. 'A Parcel of "Tealby" Type Pennies from France', *NCirc* 74, 125-26.
 40. 'A Suspicious Looking Penny of Stephen Type VII', *NCirc* 74, 204.

1967

41. 'A Remarkable Parcel of Norman Pennies in Moscow' (with C.E.Blunt), *BNJ* 36, 86-92, Pl.3-4.

1968

42. 'On Some Hoards of the Time of Stephen' (with C.E.Blunt and P.H. Robinson), *BNJ* 37, 35-42.
 43. 'A Note on the Mint of Horncastle', *BNJ* 37, 191-92.
 44. 'A Cricklade/Salisbury/Wilton Die-Link in William I Type VIII', *NCirc* 76, 224-25.

1969

45. 'Mr Pagan's Numismatic "Geese"', *NCirc* 77, p.199.
 46. 'Two Wiltshire Coin-Hoards of the Time of Stephen' (with C.E.Blunt), *Wilts Arch & Nat Hist Mag* 64, 65-70.
 47. 'Davit on Gipe', *Crowther FPL* 1969 No.1, p.3.

1970

48. 'Southampton/Winchester Die-Links in Canute's Quatrefoil Type', *BNJ* 39, 6-11, Pl.10.
 49. 'Stephen Type VII - A "New" Mint', *BNJ* 39, 164-65.

1971

50. *SCBI* 16. *Collection of Ancient British, Romano-British and English Coins formed by Mrs Emery May Norweb, Part 1, to 1180*, (with C.E. Blunt and R.P.Mack).
 51. 'A Supplementary Note on the Mints of Bedwyn and Marlborough', in *Mints, Dies and Currency: Essays Dedicated to the Memory of Albert Baldwin*, edited by R.A.G.Carson, (1971) pp.121-27.

1972

52. 'Two Pennies of Stephen Type I', *BNJ* 41, 206.

1975

53. 'Two Suspect Coins of Stephen', *SCMB*, 151-53.

OBITUARY

DR MICHAEL DOLLEY, MRIA, FSA

The death of Michael Dolley on 29 March 1983 at the early age of 57 has brought to an untimely close an important chapter in the study of the numismatics of the British Isles. It has also deprived the Society of one of its most able and active members. Elected to membership of the Society in May 1951, Dolley became a member of Council in 1952, Secretary in 1954 and Director in 1956, a post he held for seven years. In 1959 he was awarded the Sanford Saltus Gold Medal. Early in 1964 Council appointed him as its corresponding member for Ireland and he remained so until 1977. He served a final year on Council in 1977-8 and in March 1981 was elected to Honorary Membership.

He was an editor of this *Journal* from Volume 33 (1964) to Volume 47 (1977) inclusive, originally taking office to assist with the transfer of the printing of the *Journal* from Oxford to Dublin, which he had been primarily responsible for negotiating. His record for personally introducing new members to the Society is probably unsurpassed.

Born in Oxford on 6 July 1925 with a twin brother, he was baptised with the names Reginald Hugh. At his confirmation he adopted a third name, Michael, by which he later chose to be known; he added the M to his initials in 1953 and after fifteen years dropped his baptismal names. His father, A.H.F.Dolley, was a civil servant; his mother, Margaret (née Horgan), came from an Irish family although she lived all her life in England. He was educated at Wimbledon College and King's College, London (where he read ancient and medieval history), and in 1950 he married Mary Harris, who had been a fellow student at King's. To their five children born to them (three girls and two boys) they added a sixth, by adoption, so that their youngest daughter could grow up from her earliest days with a twin 'sister'. It was an inspired choice that she should be of African origin.

Dolley's first official appointment was in 1948 as Assistant Keeper of Oil Paintings at the National Maritime Museum, Greenwich. At university he had developed a special interest in Byzantine maritime history and had intended to take a PhD in that subject. In the event his duties at Greenwich precluded this, but he published a number of papers, the first of which - written while still at King's - remains the authoritative account of the Byzantine *dromon*.¹

In 1951 Dolley joined the staff of the British Museum as an Assistant Keeper in the Department of Coins and Medals. This was a turning point, not only for him but also for medieval British numismatics, the field in which he was designated to work. He found that the study of the later Anglo-Saxon coinage was ripe for development and he quickly injected it with a sense of purpose and urgency, not least through his early participation

in the preparations being made in Stockholm to publish the vast quantity of material from the Swedish hoards of the Viking Age.

In all this he drove himself extremely hard and expected others to work under similar pressure. 'Taking tea with the vicar', his euphemism for other calls on the time of at least one of his pupils, exasperated him. By the same token nothing was too much trouble for him when it came to advising and encouraging students. He was able to obtain permission from a wise Keeper (John Walker) for those engaged in serious research to have direct access to the relevant cabinets at special times, and this made for rapid and exciting progress which he himself continually stimulated. Those were the days when trust was respected, not abused; such intimacy of access to the National Collection would be difficult to concede today.

From the start, Dolley demonstrated that fast progress required good teamwork. He was generous to a fault in acknowledging help; the substantial number of joint papers amongst his prodigious output provides eloquent testimony to this. Sometimes the part played by the co-author was quite minor, but in many cases the co-operation was real and essential. In an obituary of Francis Elmore-Jones, the chartered surveyor who, although Dolley's senior by more than 25 years, was one of his closest collaborators, Peter Mitchell has written that:

Michael Dolley's arrival at the Department of Coins and Medals in the British Museum was a turning point. It was FEJ's unrivalled knowledge of the coins combined with Dolley's academic genius and enthusiasm which led to a virtual re-writing of late Anglo-Saxon numismatics through frequent papers in the *Journal*. Without Dolley's stimulus and drive I am not sure how much, or how little, of FEJ's knowledge would ever have been put to paper.²

Probably the most important single result of this partnership found expression in a joint paper in 1956, 'An Intermediate Small Cross Issue of Aethelred II and some Late Varieties of the Crux Type'.³ In recognising that there had been an abortive attempt to replace the Crux issue by reverting to the Small Cross type of Edgar's reform, Dolley and Elmore-Jones had discovered the key to the final ordering of Aethelred's types. There followed a detailed analysis by Dolley of the three Small Cross issues, in which he demonstrated for the first time the extent to which the cutting of dies was decentralized.⁴

The strongest and most sustained numismatic influence on Dolley was undoubtedly that of Christopher Blunt. Already a past president of the British Numismatic Society by the time Dolley arrived at the Museum, Blunt had recently turned his attention from the fifteenth century to the Anglo-Saxon series. He quickly recognised Dolley's potential and so began a working friendship that was to last for the remainder of Dolley's lifetime. The combination of established numismatist and impatient academic created a tidal wave that swept all before it and led to the transformation within a decade of the status of Anglo-Saxon numismatic studies. Their first major collaboration concerned the Chester (1950) hoard of the mid-tenth century, leading to a paper which was read to the Society in January 1953 prior to publication.⁵ There followed seven years later a review of the hoard evidence for the coinage of Alfred.⁶ The length of the intermission is deceptive, however. For five years from June 1956 Blunt, a merchant banker by profession, was President of the Royal Numismatic Society and three of his annual addresses were devoted to a review of Anglo-Saxon coinage, with considerable emphasis on Dolley's work. Blunt had also created at his Wiltshire home regular opportunities for serious dialogue between numisma-

tists, led by Dolley and himself, and outstanding historians of the day, most notably the Stentons and Dorothy Whitelock.

This dialogue made a profound impression on all concerned. As early as April 1958 Sir Frank Stenton, addressing the British Numismatic Society on the occasion of its first meeting at the Warburg Institute, was able to say:

Through the work of numismatists - of collectors, of museum specialists, and the like - a situation has now been reached at which the historian concerned with Anglo-Saxon England is compelled, whether he likes it or not, to take notice of the main conclusions which are indicated by the study of coins. That development has come about, I think, very rapidly...and...from the historian's point of view...the need for a conscious and continuous alliance between numismatists and historians has never been so urgent. [Of especial] importance [is] the numismatic evidence for the last century of the Anglo-Saxon state which is being dealt with largely by Mr Michael Dolley. For there the evidence of coins is suggesting conclusions, I think undoubtedly convincing, which give a new sharpness of definition to our old conception of the Anglo-Saxon state in the last generations before the Conquest, [namely] that England from 973 or 974...possessed a managed currency, a currency controlled by a centralised authority and decentralised in distribution and exchange to a degree which is most remarkable.⁷

In his turn Dolley's immense regard for Stenton led him to organise and edit an essentially numismatic *Festschrift* to mark Sir Frank's eightieth birthday. Published in 1961, *Anglo-Saxon Coins*⁸ contained major essays on important but hitherto ill-published parts of the series from Offa to the Conquest, including five papers of which Dolley was a joint author. But the most significant practical result of the dialogue between numismatists and historians was the commitment by the British Academy to the publication of a *sylloge* of coins of the British Isles, the early fascicules of which would be devoted primarily but not exclusively to issues of the pre-Roman, Anglo-Saxon, Norman and early Plantagenet periods. The inspiration was Blunt's, but Stenton was the catalyst which enabled the project to proceed. Primary responsibility for planning and organising the work lay with Blunt and Dolley as members of the Academy's *Sylloge Committee*. They were also the general editors of the thirty fascicules that have so far been published, starting in 1958; latterly they were joined by Mark Blackburn. Dolley himself was the author or co-author of five.

Not content with the plans to publish the surviving material, collection by collection, Dolley first persuaded and then taught others to prepare detailed corpuses of the issues of individual mints, including comprehensive die-analyses. Quite the most remarkable achievement in this field was the publication in 1970 of Henry Mossop's study of the mint of Lincoln.⁹ For the first time numismatists and historians could obtain a clear impression of the way in which a major Anglo-Saxon and Norman mint operated, the changes in staffing, die-cutting and metrology that took place during the period, and the extent to which the chances of survival have distorted the visible pattern of the coinage. Mossop, a Lincolnshire farmer, was not a trained scholar but was more than willing to undertake the enormous task of compiling a fully illustrated corpus of the material, inspired and guided by Dolley and helped in the editorial stages by another pupil of his, Veronica Smart (née Butler).

A high proportion of the material surviving from the late Anglo-Saxon period is in the public collections of the Scandinavian countries, the greater

part in Sweden. Indeed there are more than 150,000 coins from the Viking Age, mostly Arabic, German and English, in Swedish public collections, primarily in the Royal Coin Cabinet in Stockholm. Catalogues of the Anglo-Saxon coins in the Cabinet had been published in 1846 and 1881 by Bror Emil Hildebrand, but it was not until after the Second World War that serious steps were taken to prepare for publication a corpus of all the known Viking Age hoards. Research on the Arabic coins had begun at the Royal Coin Cabinet in the late 1930s and German scholars started work on the material from their country in 1949. In 1952, when Dolley visited Stockholm for the first time, the project was extended to the Anglo-Saxon coins.

Dolley took up this challenge with characteristic energy, greatly admiring the main architect of the project, the late Nils Ludvig Rasmussen, who was then Keeper of the Royal Coin Cabinet. A regular programme of visits from England was established with finance from the Swedish Humanistic Fund (now the Humanistic Research Council), and Dolley set about recruiting a team of helpers. The most regular of these were to be Gay van der Meer (from The Hague) and Veronica Smart, with occasional visits by the present writer and others.

Apart from the routine work of recording the Anglo-Saxon coins in the identifiable hoards and checking weights and dies, Dolley's visits to Stockholm invariably resulted in a stream of papers or notes for publication in *BNJ*, *NC* and elsewhere. He was a prolific writer and found it easiest to commit his thoughts instantly to paper, even if this meant that some of his conclusions were open to challenge. And challenges were not slow in coming. They related particularly to the date postulated for Edgar's reform of the coinage (Michaelmas 973) and to the hypothesis that the design of the coinage was changed every six years thereafter until the death of Cnut (except for a hiccup at the end of Aethelred's reign) and subsequently at intervals of three years.

The argument on these two related issues has continued now for twenty-five years and has tended to generate more heat than light. It has also tended to obscure Dolley's major achievement, which was to establish that Edgar's reform resulted in the periodicity of types and in the effective demonetization of the old type when a new one was introduced. It has to be remembered that the standard textbook of the time, G.C.Brooke's *English Coins*, was able to say of Aethelred's coinage that it 'represents an incomplete stage in the development of the type-changing system, when the first type continues while other types appear in succession; the reason for this peculiar feature may be found, if we have rightly interpreted the coinage of previous reigns, in a conservative regard for the type introduced by Edgar.'¹⁰ Recognition of the system of periodic recoinages provided an essential key to the understanding of the late Saxon and Norman coinages. In particular, it has facilitated the study of the economic aspects of the monetary system, such as metrology and estimation of mint output, a field which has seen significant advances in the last fifteen years, but in which we have still a great deal to learn. The periodic system also has the potential to allow much closer dating for the loss of coins found in excavations and elsewhere, provided it can be established that the renovations were substantially complete and there can be agreement on the dates of the recoinages.

As yet, however, it is too soon to judge whether Dolley's precise dating of Edgar's reform to Michaelmas 973 is likely to be correct, but the extent of the reformed coinage seems to be against those who insist - as Stenton did not - that Roger of Wendover specifically placed it in 975, in which year Edgar died on 8 July. Time is also needed to judge whether the

different period-types which followed were broadly of equal duration and whether in every case period-types involving a *renovatio* have been validly distinguished from systematic but limited changes in design made for some lesser purpose of monetary control. The present writer and the present President are among those who have entered the lists on these latter questions and have emerged battered but unpersuaded. The key, if one can be found, seems likely to lie in placing within an historical context a wider statistical analysis of the hoard evidence than has so far proved possible.

When his ideas were challenged, Dolley had an unhappy tendency to react polemically, both in conversation and in subsequent writings, particularly if in his opinion the challenger, however distinguished, had insufficient knowledge of the series in question or its historical setting. This inhibited rational discussion and, in later years, when his general health was declining and the problem was becoming increasingly serious, it tended also to deter the promulgation of dissenting opinions, so giving the impression that on some topics his views were more widely accepted than was in fact the case. Frustration over some perceived action (or inaction) of a friend or colleague could also exacerbate him beyond reason. Thus his years in the rather introspective environment of the Coin Room cannot have been comfortable for his professional colleagues. At all events, after he left the Museum in 1963 to take up a lecturership in medieval history at the Queen's University of Belfast, he did not obtain during vacations the help and co-operation from the Coin Room that his scholarship taken on its own would have justified. This caused him much mortification. More importantly, it also put back until after his death any prospect of a *sylloge* fascicule covering the late Anglo-Saxon coins in the National Collection.

There were, however, significant works still in the pipeline, among them two Gulbenkian handbooks, published by the British Museum in 1964 and 1965 and written for the general reader. The first, *Anglo-Saxon Pennies*, filled a serious gap in that it summarised clearly and concisely the modern view of the series. The second, *Viking Coins of the Danelaw and of Dublin*, was a necessary companion in what should have been a Museum trilogy, but regrettably by 1966 he had to find an outside publisher for *The Norman Conquest and the English Coinage*. Happily, he had prepared while at the Museum his SCBI fascicule, *The Hiberno-Norse Coins in the British Museum*, which was duly published by the Trustees in 1966. Not only does this contain a masterly analysis of the Hiberno-Norse coinages from c.995 to c.1150, but it is also an essential work of reference for the coin hoards of the Viking Age from the British Isles and the context in which they were deposited.

Although the bulk of Dolley's work was on the late Anglo-Saxon and related coinages, he did not neglect the earlier and later periods. The number of his published articles on these would be regarded as exceptionally large from any other pen, and he joined with David Brown in a bibliography of hoards of the sixteenth century onwards from the British Isles.¹¹ His excursions into foreign medieval coins, apart from the early issues of Scandinavia, were few. The most notable was a study of Carolingian coins with Karl Morrison, leading to a catalogue of the British Museum collection of those pieces.¹²

Dolley's move to Belfast in 1963 was not as strange as it may have seemed at the time. Due to his mother's Irish origins and his own very strong Catholic faith he had long been deeply concerned about the partition of Ireland and felt that his own destiny was bound up in it. He threw himself with his usual energy into his work at Queen's, where in a difficult situation his genuine concern for his students was quickly evident. In 1964

he was elected a Member of the Royal Irish Academy, which he was later to serve as Senior Vice-President (1972-73). Although the regular visits to Scandinavia and the consequent writings continued, he began to turn increasingly to later Irish numismatics. He established a close relationship with Wilfred (Bill) Seaby, then Director of the Ulster Museum, who gave him his friendship, collaboration and open access to the important coin collection there. Together they compiled an SCBI fascicule of Anglo-Irish Plantagenet coins, published in 1968.¹³ Of Dolley's own work, particular mention should be made of his *Medieval Anglo-Irish Coins* and an historical textbook on Anglo-Norman Ireland, both published in 1972.¹⁴

By 1978 the strain on Dolley and his family of the deteriorating political situation in Northern Ireland was noticeably affecting his health and despite having been awarded a personal chair in historical numismatics in 1975 (following a readership in 1969) he decided to leave Belfast and settle his family in Devon. He himself accepted a post in Australia at the University of New England in Armidale, NSW, which led in 1981 to an associate professorship. This was not a happy time for him; the isolation from Europe was not conducive to good scholarship yet the urge to write was still in him. Nor was the separation from his family good for his health, and retirement became inevitable later in 1981. He was a shadow of his former self, prematurely aged, when he received the medal of the Royal Numismatic Society in the same year, but there were inner reserves that he could somehow draw upon when his participation in important meetings was essential (such as the Oxford Symposium on the Coinages of the Northern Lands), or a Scandinavian or Irish visit had to be undertaken. The firm friendship of Mark and Fiona Blackburn during this last period was invaluable.

In addition to the two premier numismatic societies in this country, Dolley was a medallist of the Swedish (1979), Norwegian (1982) and American (1983) Numismatic Societies. He was also a foreign corresponding member of the Royal Swedish Academy and a foreign member of the Royal Danish Academy. A few months before his death he received a DLit from the University of London and it was while on his way to accept an Honorary DLitt from the National University of Ireland that his final illness struck him, in Cork. His destiny had been fulfilled.

He was buried in Cuckfield, Sussex, in his mother's grave, his family and closest friends attending the service. The wide respect and warmth of feeling for him in Ireland was reflected in the large congregation which attended the requiem mass in Belfast, arranged by the University and presided over by Cardinal O'Fiaich, primate of All Ireland.

It is fitting that one of the last of his papers to be published in this *Journal* was a full exposition of his views on the date of Edgar's coinage reform.¹⁵ That it was substantially written 'a whole induction ago', as he said in a footnote, does not detract from its appropriateness. Bearing all the hallmarks of Dolley's scholarship of that earlier time, it nevertheless gives us a clear valedictory message on the subject with which he is most clearly associated and his authority most widely recognised, namely Edgar's reform and its far-reaching consequences for the numismatic history of the British Isles and all the northern European lands.

Pie Jesu Domine, dona ei requiem.

Stewart Lyon

NOTES

1. R.H.Dolley, 'The Warships of the Later Roman Empire', *JRS* 38 (1948).
2. *NCirc* 90 (1982), 52.
3. *BNJ* 28 (1955-57), 75-87.
4. R.H.M.Dolley, *Some Reflections on Hildebrand Type A of Aethelraed II* (Stockholm, 1958).
5. C.E.Blunt and R.H.M.Dolley, 'The Chester (1950) Hoard', *BNJ* 27 (1952-54), 125-60.
6. C.E.Blunt and R.H.M.Dolley, 'The Hoard Evidence for the Coins of Alfred', *BNJ* 29 (1958-59), 220-47.
7. F.M.Stenton, 'The Anglo-Saxon Coinage and the Historian', in *Preparatory to Anglo-Saxon England*, edited by D.M.Stenton (Oxford, 1970), 371-82 at pp.371 and 374.
8. *Anglo-Saxon Coins: Historical Studies presented to Sir Frank Stenton on the Occasion of His 80th Birthday, 17 May 1960*, edited by R.H.M.Dolley (London, 1961).
9. H.R.Mossop, *The Lincoln Mint c.890-1279*, edited by V.Smart with contributions by M.Dolley and C.S.S.Lyon (Newcastle upon Tyne, 1970).
10. G.C.Brooke, *English Coins*, 3rd edition (London, 1950), p.67.
11. I.D.Brown and M.Dolley, *A Bibliography of Coin Hoards of Great Britain and Ireland 1500-1967* (London, 1971).
12. R.H.M.Dolley and K.F.Morrison, *The Carolingian Coins in the British Museum* (London, 1966).
13. SCBI, *Ulster Museum, Belfast, Part 1, Anglo-Irish Coins: John-Edward III*, by M.Dolley and W.Seaby (London, 1968).
14. M.Dolley, *Medieval Anglo-Irish Coins* (London, 1972); M.Dolley, *Anglo-Norman Ireland* (Dublin, 1972).
15. M.Dolley, 'Roger of Wendover's Date for Eadgar's Coinage Reform', *BNJ* 49 (1979), 1-11.

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY 1982

The President, Mr Brand was in the chair at all meetings, these being held at the Warburg Institute, except that in July.

On 26 January, the President announced the death of our Sanford Saltus Medallist and Honorary Member, Mr Elmore Jones, and requested members to rise as a tribute to him. Dr J. Conte and Mr V.J. Newbury were elected to Ordinary Membership. Dr C.E. King read a paper entitled 'Late Roman Hoards in Britain'.

On 23 February, Mr W. Lean and Mr T. Wherrett were elected to Ordinary Membership. Mr V.J. Newbury was formally admitted to Ordinary Membership. The meeting was devoted to five short papers on mediaeval subjects. Mr Martin Allen read a paper on some anomalous coins of Short Cross class V. Miss Archibald read a paper on a new mint for Long Cross class VI. Dr Challis read a paper on the silver trial plate of 1279. Mr C. Wood read a paper entitled 'Preliminary Thoughts on Fox class IX'. Mr Woodhead read a paper on the Aberdour Treasure Trove of 1978.

On 23 March, Mr P.A.S. Schwer was elected to Ordinary Membership. The meeting was devoted to six short papers on post mediaeval subjects. Mr Hawkins read a paper on Design Registration Markings. Mr Stainton read a paper on the Royal Academy Medal of 1793. Mr R. Thompson read a paper entitled 'The Keys of Dunkirk, 1658', Mr Webb-Ware read a paper on a hoard of tin farthings of Charles II. Mr Mernick read a paper on some uncertain seventeenth-century tokens. Mr R. Baker read a paper on some impressions of the Defence Medal, 1939-45.

On 27 April, Mr J.I. Coulthard was elected to Ordinary Membership. Mr W.A. Oddy read a paper entitled 'Assaying in Mediaeval Times'.

On 25 May, Mr M. Dessau was elected to Ordinary Membership. Mr Linecar read a paper entitled 'Of Ghosts and Counterfeits'.

On 22 June, Mr J. Mattinson was elected to Ordinary Membership. Miss Pirie read a paper entitled 'Some New Work on Stycas'.

On 17 July, a special meeting was held in the Lecture Theatre of the British Museum. Mr C.S.S. Lyon read a paper entitled 'Numismatic Evidence and its Limitations'. Dr Challis read a paper entitled 'The Royal Mint and the Civil War'. Mr Dyer read a paper entitled 'Numbered Strikings of Victorian Bronze Coins'.

On 28 September, Dr M.D. Cobcroft, Mr H.R. Coppock, and Mr D. Sorenson were elected to Ordinary Membership. Dr Challis read a paper entitled 'Small Change in Seventeenth-Century England'.

On 26 October, Mr J. Farquharson, Mr L.R. Hartz, Mr M.J. Hillier, Corporal D. Lee, Mr M.D. Mader, Mr J.F. Rainey, and the Numismatic Museum, Athens, were elected to Ordinary Membership. Mr J. Stein was elected to Junior Membership. A paper on the Vikings in Wales by Mr Dykes was read on his behalf by Mr Boon. Mr Boon also gave some further information on the Wenallt Hoard.

At the Anniversary Meeting on 23 November, Dr A.Davisson and Mr J.J. Strawbridge were elected to Ordinary Membership. The following Officers and Council were elected for 1983:

President: J.D.Brand, MA, FCA.

Vice-Presidents: C.E.Blunt, OBE, FBA, FSA; C.V.Doubleday; C.S.Lyon, MA, FSA, FIA; H.Schneider; B.H.I.H.Stewart, RD, MA, DLitt, FBA, FSA Scot, MP; P.Woodhead, FSA.

Director: G.P.Dyer, BSc.

Treasurer: R.L.Davis.

Secretary: W.Slayter.

Librarian: H.E.Pagan, MA.

Editor: C.E.Challis, BA, PhD, FRHist Soc.

Council: M.J.Anderson, MA; G.Berry, BA; M.A.S.Blackburn, MA; P.J. Casey, BA, FSA; Mrs M.Delmé-Radcliffe; R.N.P.Hawkins; N.J.Mayhew, MA; P.Mernick, BSc; R.A.Merson, FCA; P.J.Preston-Morley; J.G.Scott, BSc, MCIT; P.J.Seaby; R.J.Seaman, FIB; T.Stainton.

Council's proposal that the subscriptions for 1983 should remain unchanged was adopted.

The President, Mr J.D.Brand, delivered his Presidential Address.

REPORT OF THE AUDITORS TO THE MEMBERS OF
THE BRITISH NUMISMATIC SOCIETY

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion proper books of account have been kept by the Society so far as appears from our examination of those books. We have examined the attached Balance Sheet and annexed Income and Expenditure Account which are in agreement with the books of account and no credit has been taken for subscriptions in arrear. In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet gives a true and fair view of the state of the Society's affairs as at the 31st October, 1981 and the Income and Expenditure Account gives a true and fair view of the Income and Expenditure for the year ended on that date.

FUTCHER HEAD & GILBERTS
Chartered Accountants

Astral House,
125-129 Middlesex Street,
Bishopsgate,
London E1 7JF

19th October 1982

Balance Sheet as at 31st October 1981

1980					
£					
ASSETS					
6,000	Investments at cost				
	£6,000 City of Cambridge Stock				6,000.00
200	J. Sanford Saltus Medal Fund				
	Cash at Bank on Deposit				200.00
167	Schneider Research Fund				
	Cash at Bank on Deposit				167.00
150	Library at cost, less				
	amounts written off				150.00
10	Furniture at cost				10.00
					<u>6,527.00</u>
2,507	Sundry Debtors				1,277.76
	Cash at Bankers and in Hand				
575	Bank - Current Account				1,914.72
10,225	- Deposit Account				12,318.17
-	In Hand				<u>1.64</u>
					<u>14,234.53</u>
19,834					<u>15,512.29</u>
					<u>22,039.29</u>
Less LIABILITIES					
164	Subscriptions Received in Advance				30.00
280	Sundry Creditors and				
	Outstanding Charges				743.53
200	J. Sanford Saltus Medal Fund				
	Capital Account				200.00
167	Schneider Research Fund				
	Capital Account				167.00
	Journal Provisions				
	1980 (Provision towards Cost)				10,981.52
20,234	1981	do			<u>7,100.00</u>
					<u>18,081.52</u>
<u>£ (400)</u>	NET ASSETS				<u>£2,817.24</u>

1980
£

£

Financed by:

General Purposes Fund

2,174	Balance at 1st November 1980	(399.75)
(2,574)	Add Excess of Income over Expenditure for the year	3,216.99
<u>£ (400)</u>	<u>SURPLUS (DEFICIT - 1980)</u>	<u>£2,817.24</u>

*Income and Expenditure Account for the
year ended 31st October 1981*

1980
£

£ £

INCOME

5,189	Entrance Fees and Subscriptions received for 1981 and earlier years	8,376.84
1,417	Income Tax recoverable	689.16
72	Donations	1,082.15
1,849	Interest received	1,669.25
501	Sale of Publications: Back Numbers	329.00
<u>9,028</u>		<u>12,146.40</u>

Less EXPENDITURE

-	Sanford Saltus Medal	332.35
269	Printing, Postage and Stationery	411.58
	Expenses of Meetings, Rent and Library facilities	67.10
58	Sundry Expenses	791.38
262	Journal Expenses: 1980 Journal	
	Cost	10,827.00
	Less Provision	<u>9,900.00</u>
1,313		927.00
(200)	Less British Academy Grant	(700.00)
		<u>227.00</u>
10,600	Provision towards cost of 1981 Journal	7,400.00
(700)	Less British Academy Grant	(300.00)
		<u>7,100.00</u>
11,602		7,327.00
<u>£(2,574)</u>	<u>EXCESS OF INCOME OVER EXPENDITURE</u>	<u>£3,216.99</u>

*Note: The Society has purchased an
electronic typewriter which has
been written off in the 1981
Journal Expenses.*

PRESIDENTIAL ADDRESS

1982

J.D.Brand

Now is the time for us to take stock. For me, as President, to review what we have done, what we are doing, perhaps what we should be doing.

Firstly, however, I wish to say a few words about our Honorary Secretary, Mr Wilfrid Slayter. A few minutes ago I read out Council's proposal that he should be elected as an Honorary Member. We do not vote on that until next February, at which time I will speak more fully to the motion. Tonight, however, marks the completion of twenty years service by Mr Slayter as our Secretary. In fact he did take over many of the duties a few months earlier, but it was in November 1962 that my distinguished predecessor, Derek Allen, said 'I welcome him in this critical and central role, to which I am sure he will bring energy and devotion to his task'. Allen's confidence was not misplaced, as all Presidents since then have gratefully acknowledged. A score is a good round number, and it seemed to Council that a score of years' service was an appropriate anniversary to mark. I hasten to add that under our constitution an Honorary Member is a full member of the Society. We hope and expect Wilfrid Slayter to continue as our Secretary for some long time yet. Honours, however, should be awarded when deserved; and we believe that Wilfrid Slayter thoroughly deserves that he should be honoured now.

Our membership figures are somewhat better than was anticipated at this time last year. Our nominal roll remains at just over 500 (382 personal and 126 institutional), for despite the loss of three members by death, twelve by resignation, and ten by removal, we have elected in the year twenty-one new members. Even so, we need to increase our membership to remain financially viable. Just as important is that the members we do have pay their subscriptions on time and in full. A significant number still pay at old rates, or late in the year, and this causes our Honorary Treasurer a great deal of unnecessary work.

Our losses by death include one of our most senior and respected members. Mr Francis Elmore-Jones joined the Society in 1938. His quite remarkable gifts included the ability to memorise and recognise the products of individual dies, or even parts of dies, which was so particularly useful in his work on the later coins of Stephen and the 'Tealby' issues of Henry II. He was awarded the John Sanford Saltus gold medal as long ago as 1956, and continued for long thereafter to publish important papers in our *Journal* and elsewhere. He was elected to Honorary Membership in 1973, and volume 47 of the *Journal* was dedicated to him on the occasion of his eightieth birthday: a specially bound copy was presented to him at our seventy-fifth Anniversary Meeting in November 1978. Sadly, that was the last occasion on which he attended one of our meetings, for before then his eyesight

had deteriorated, and he had for some time been unable to work on his beloved coins.

Mr Richard Lubbock senior, who died in November 1981, had been a member since 1963. He was a well known member of the 'Trade'.

Professor Dorothy Whitelock had only a peripheral interest in numismatics. A distinguished historian of the Anglo-Saxon period, she recognized that coins were historical evidence. Although a member since 1958, she took no direct part in the activities of this Society, but she was an influential member of the British Academy committee for the *Sylloge of Coins of the British Isles*, and thus played a significant role in British numismatics.

Our major activity is to publish the *British Numismatic Journal*. For some years production and printing costs had kept ahead of our income, and it has been a continual source of worry to my predecessor and myself to ensure its survival, even at a slimmer size. Last year I reported that Council were considering ways by which we could take advantage of recent advances in technology and thereby print more words for less money. The results of our deliberations can be seen in the advance copy circulating tonight. Bulk posting should take place so that all paid-up members receive their personal copy before Christmas. The physical format is larger than our traditional size; which must be a matter of some regret. But if we were to change, volume 51 is as convenient a number as any with which to start a new bookshelf. The contents are set on an electronic typewriter, and therefore also differ from what we are accustomed to. The type-face is, however, a little larger than before, which may be helpful to those of us whose eyesight is not as good as it once was. As always, the book size and the type size are compromises: compromises between convenience to members and cost effectiveness. Reactions to it have varied from 'I prefer it' at one extreme to 'I am dismayed' at the other. Hopefully, those who would have preferred to stay with the former style will also recognize the advantages of the new. We have been able to print half as many words again as by traditional methods, and reduce total costs by some thousands of pounds. Moreover, for the future, costs are much more closely within our direct control. The main purpose of the *Journal* is, after all, to publish research.

We must thank our Editor, Dr Challis, for the initiative which led us to re-examine our methods. We must also thank him for the great amount of voluntary work which goes into editing a periodical of this size; aggravated this year by the teething problems of a new system.

For the first time in several years our financial position is not one of gloom. Our Treasurer has reported to you on our Accounts to 31 October 1981, and on the prospects for the year just ended. We have a little money in hand, we expect our expenditure to be within our income for 1982 and, as you have heard, for 1983 as well. We cannot, at this time, assess with any certainty what the position will be for 1984 (as our main expenditure charged to that year will actually be incurred in 1985), but I am hopeful that, if inflation is kept within current bounds, we will be able to maintain our present subscriptions for 1984, and that it will be in respect of the year 1985 before we have to consider the choice between raising subscription levels and slimming the *Journal* a little from its new increased thickness. At this point I would like specially to thank our Honorary Treasurer, Mr Davis, for all his work on your behalf. It may surprise some members to know that his duties average out at a requirement of something over five hours a week, every week of the year; not an inconsiderable burden.

Our Honorary Librarian, Mr Pagan, also puts in several hours work

every week in maintaining and improving our Library. So does our Honorary Assistant Librarian, Mr Donald, who comes up to London at his own expense every week to work on our behalf. We thank them both very much indeed. As you will know, our library is commingled with that of the Royal Numismatic Society; Mr Pagan and Mr Donald are also Librarian and Assistant Librarian of our sister society; and there is a Joint Library Committee. Rather than ask Mr Pagan to prepare a special report for us, I quote some details from his report to that Joint Committee for the year ended in September last. Borrowings numbered 477 volumes, and were borrowed by 71 persons of whom 43 gave their main allegiance as the Royal N.S. and 28 gave their main allegiance as this Society. We have to say 'main allegiance', for a goodly number belong to both. What it seems to mean, however, is that a smallish number of members of the Societies each borrow quite a lot of books. There are others who use the library for reference purposes, without actually borrowing: we have no figures for that, and certainly a number of our members browse in the library before our monthly meetings. Postage costs are such that very few members now avail themselves of the facility of having books sent to them by post; but it is available on application to the Honorary Librarian. For many years past our financial position was such that we were forced to starve our library of funds for the purchase of books. Council has, however, now decided to devote some part of the savings on printing costs of the *Journal* to expenditure on the library. In the financial year just ended nearly £500 has been spent to fill some important gaps, but prices these days are such that £500 does not buy many volumes. We hope that the recent circulation of a list of books which were once in the library but are now missing will result in many of them being returned, or other copies donated. Other gifts are always welcome.

Mr Dyer, our Director, we thank for many services, the most obvious of which is to provide us with a well balanced programme of excellent speakers at our meetings. My impression is that average attendance at our regular meetings has been somewhat lower during this year than in recent years; which is a pity but perhaps understandable in the light of ever increasing travel costs. Nevertheless, I hope it is a trend which will be reversed. A large number of our members outside London can, of course, never or only very rarely attend our evening meetings. For their benefit we arranged a special meeting on a Saturday afternoon last July. Unfortunately it coincided with a total rail strike, and attendance was naturally low. Even so, some people were keen enough to travel very long distances to be present, and we intend to repeat the experiment next year. We must particularly thank the British Museum for making their lecture theatre available to us.

Six full-length papers were read to us during this year. Dr King reviewed late Roman silver hoards in Britain with special attention to the particular problems of clipped siliquae: a version of her paper is printed in *BNJ* 51. Miss Pirie gave us some preliminary points arising from her detailed work on Northumbrian stycas: some of her suggestions were controversial and led to a lively discussion. Mr Boon stepped in at the last moment for Mr Dykes who was unable, for the second year, to come, and reviewed the recent Cnut hoard found in North Wales as well as giving us some further thoughts arising from his studies of the Matilda hoard from South Wales. Mr Oddy opened up for us the techniques available in the Middle Ages for assaying the precious metal content of coins by non-destructive means; and we should particularly note the accuracy of the touchstone method for establishing the fineness of gold. Dr Challis spoke to us about the provision of small change in the early seventeenth century,

making the point (which many of us had not realised) that the copper farthing tokens represented the first real small change in English history. Mr Linecar gave us a lively account of his work on the detection of modern forgeries.

Only slightly less in length, and still major contributions, were the three papers delivered at the special meeting in July. Mr Lyon spoke on the limitations of numismatic evidence, drawing most of his examples from the Anglo-Saxon period but with a wider relevance. Dr Challis reviewed the activities of the Royal Mint in the seventeenth-century Civil War period, pointing out a number of factors not usually considered by the numismatist. And Mr Dyer gave a convincing explanation of the exceedingly rare numbers scratched on some Victorian bronze coins.

The two evenings devoted to short papers were, as usual, very popular. There were five contributions to the one on medieval issues: curiously all within the Plantagenet period. Mr Martin Allen discussed some anomalous coins struck early in the 1205 renovation of the coinage, some of which may, or may not, be contemporary forgeries. Miss Archibald showed a cut half-penny of Long Cross class VI struck at London: the type was previously known (by single pairs of dies) only from Bury and Durham. Dr Challis discussed and queried the so-called trial plate of c.1279. Mr Wood gave us some preliminary thoughts on the complicated die-sinking problems associated with Fox class IX in the Edwardian penny series. And Mr Woodhead described the Anglo-Scottish Aberdour treasure trove, and dated its final deposit to c.1373 from the Scottish element.

No less than six contributions were squeezed into the evening on post-medieval topics, and covered a wide range of subjects. Two, by Mr Mernick and by Mr Thompson, discussed uncertain seventeenth-century private tokens. Mr Webb Ware described a hoard of tin farthings of Charles II, in such fine condition that he was able to die-link many of them and to correct Peck's surmise on the method used to improve the edge inscriptions. Mr Stainton spoke on the Royal Academy medal of 1793 (which he showed was never produced!), and by coincidence a letter exhibited at the meeting by Mr Merson was relevant to the subject. Mr Hawkins described the system of nineteenth-century Design Registration Marks, which may be relevant to some coin-like objects. And Mr Baker showed some curious uniface impressions of the 1939-45 Defence Medal.

All in all a very wide range of subject matter was presented during the past year, of much interest, and leading to several useful discussions.

Another innovation in this past year was the organization of a full-day colloquium on a specific subject. Held in London, it was devoted to pub checks, which have attracted much attention recently. The proceedings were stimulating and certainly furthered understanding of these sometimes enigmatic pieces. For this coming year a somewhat similar meeting is proposed, hopefully to be held in Birmingham, on the topic of the Soho mint of Boulton and Watt.

The past year has, then, been quite successful. We have changed the *Journal* format so that we can print very much more than in the recent past. We are improving the library. We have had a full programme of interesting meetings. We have for the first time held an experimental Saturday afternoon meeting. We have for the first time organised a colloquium. Is this enough? Are we doing the right things? Are we even necessary at all to the numismatic scene in this country?

During the last year or so, two senior members have, independently, suggested to me that perhaps the Society is superfluous; that two national

numismatic societies in this country might be one too many. Certainly there are some disadvantages and difficulties in the present arrangement. On the other hand there are some advantages, which we should not discard lightly.

Rather, then, than approach this from the question of whether there is room for two societies, it might be more fruitful to enquire whether a single national society can be all things to all men; whether a single society can satisfy the needs and requirements of academic numismatic study. It is said that other countries only have one and manage perfectly well: but I know that in some other countries the medievalists, at least, look to us with more than a tinge of envy.

Because this Society was born in acrimony, as a breakaway from what is now the Royal Numismatic Society, there is an overlap in purpose. The Royal is charged by its charter to encourage numismatic study of all periods and of all countries, but particularly of this country. It still, therefore, in its meetings programme and in its publications, includes British numismatics, although only to a small extent. There is thus diffusion of effort. That in itself, however, is not an argument for abolishing the BNS and BNJ, but is perhaps an indication that there should be some rationalisation. Numismatics of all countries of all periods covers a great diversity of interests. Does the *Numismatic Chronicle* really cater satisfactorily for anyone at all? There must be very few people apart from the General Editor who read every word in each volume. Equally, of course, there cannot be many people apart from its editors who read every article in *BNJ* either, for most of us specialise to some extent even within the specialism of British numismatics.

It is quite normal for even a specialist society and periodical to cover a wider range than any individual member or reader is closely interested in. There is strength in numbers; but there can also be a waste of resources. The larger the print run, the cheaper becomes the unit cost of printing: so the cost per member is less for every article printed, and apparently it is easier to afford space for minority interests. If, however, one takes this to the extreme, an article of no interest to anyone apart from its author is a complete waste of money however little it costs. Editors constantly have to make difficult judgements on the balance of interests. There is an element of wasted resources in every specialised article. Put another way, every specialist article is subsidised, to some extent, by those subscribers who have no interest in its subject or content. For myself, I think it is proper that some part of my subscriptions should be used to publish papers in which I have no personal interest. To be pompous, it is part of my contribution to the Arts. To be practical, it also means that other people help subsidise the costs of the articles in which I am particularly interested. But one has to draw the line somewhere. There are many periodicals to which I do not subscribe because their occasional inclusion of something of interest to me does not warrant the expenditure of money (and shelf space) regularly to acquire personal copies.

If this Society ceased its separate activities, ceased publication, then the Royal Numismatic Society would be left once again as the sole society in this country with academic numismatics as its principal object. Could the RNS cope with the extra demands which would be made upon it? Even if it did increase its coverage of British numismatics in a marked way, would the result be sufficient to satisfy the quite large proportion of its present membership which is primarily interested in British numismatics? The difficulties and controversies at the beginning of this century, which led to the formation of the BNS cannot wholly be dismissed as simply clashes of personalities. The one and only learned numismatic society of that era

could not provide sufficient time and space to satisfy the keen, vociferous (and verbose) students of the coinage of these islands. Without a fundamental change in organization and policy, a single society could not do so today. I am not qualified to judge as to whether the present RNS is satisfactory to students primarily interested in other specialisms. What I can say with confidence is that, within numismatics generally, there are several main streams of study which only partially overlap in techniques and outlook. And I have heard the verbal resentment which some other members of the RNS occasionally express when a meeting is devoted to a 'British' topic; which may indicate that their own interests are not being fully catered for.

In a utopian world one might consider that it would be more sensible to have numismatic societies and periodicals arranged internationally by broad specialism. But that will never come about. We are forced into national societies, with each country covering all aspects and all eras. In some other countries there is only, apparently, sufficient numismatic support to sustain one academic society with one programme of meetings and one publication. In this country we can certainly support at least two programmes of meetings and two publications. It is an unnecessary luxury, however, to support two separate societies to administer them. With one society, with sufficient officers to do the work, we could rationalise our activities and provide a better service. But it will not happen in the foreseeable future: largely because of personalities. For just the same reasons why we broke away in 1903, so we will have to stay apart in 1983. But at least we are on better terms than eighty years ago. There is no acrimony. We do co-operate in some areas, although for the present we cannot reconcile all our traditions and differences. I look forward to closer co-operation in the future, until eventually the time comes when all parties recognise that outmoded practices, designed by and for small numbers of members, are not appropriate to current circumstances.

For the time being, however, this British Numismatic Society does have a legitimate part to play in the numismatic life of this country: but only so long as we do maintain our activities at an academic level. There would be no justification for our continued existence if, as has been alleged in the last few years, we (or some of us) are academically disreputable. That charge has to be answered. The delay in doing so has been for what seemed very good reasons, but I think I should discuss the underlying controversy tonight.

(The President then read a paper entitled 'Periodic Change of type in the Late Anglo-Saxon and the Norman Periods'.)

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EDITORIAL NOTE

To assist contributors in the preparation of typescripts for submission to the *Journal*, and also with the marking up of proofs, Council has agreed to adopt, as far as possible, the conventions set out in the *Style Book* of the Modern Humanities Research Association. Copies are available from the Editor.

For ease of reference, each *Journal* will in future carry a list of the standard abbreviations used, without explanation, in its text and notes.

ABBREVIATIONS

BL	British Library, London
BMA	G.C. Brooke, 'Anglo-Saxon Acquisitions of the British Museum', <i>NC</i> 5th series 2 (1922), 214-44; 3 (1923), 243-59; 4 (1924), 86-95, 239-53; 5 (1925), 343-65.
BMC	<i>British Museum Catalogue</i>
BN	Bibliothèque Nationale, Paris
BNJ	<i>British Numismatic Journal</i>
BSFN	<i>Bulletin de la Société française de Numismatique</i>
CH	<i>Coin Hoards</i>
DNB	<i>Dictionary of National Biography</i>
EcHR	<i>Economic History Review</i>
JRS	<i>Journal of Roman Studies</i>
NC	<i>Numismatic Chronicle</i>
NCirc	<i>Spink's Numismatic Circular</i>
OED	<i>Oxford English Dictionary</i>
PRO	Public Record Office, London
RIC	<i>Roman Imperial Coinage</i>
RN	<i>Revue numismatique</i>
SCBI	<i>Sylloge of Coins of the British Isles</i>
SCMB	<i>Seaby's Coin and Medal Bulletin</i>

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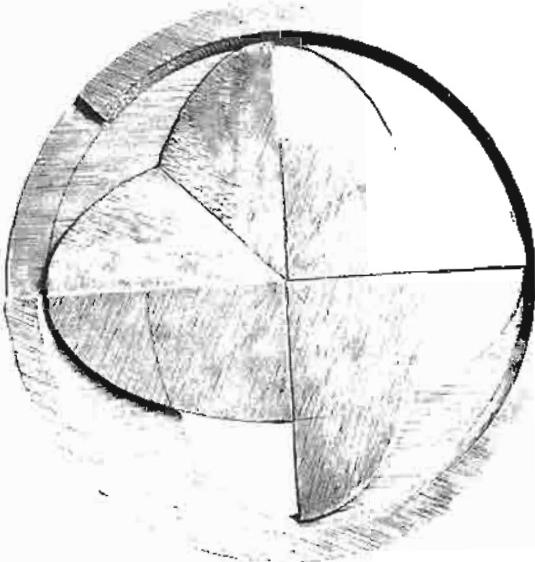
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